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GENDER RELATIONS WITHIN A
CHANGING SPATIAL DIVISION OF
LABOUR

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Doctor of Philosophy

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Faculty of Social Science : Geography Discipline

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Abstract

Recent industrial location theory argues non-labour factors affecting changes in the spatial division of labour are of diminishing importance since their spatial components are becoming relatively homogeneous. Emphasis upon labour, however, equally tends to view it as fairly homogeneous - spatially differentiated only in terms of skills (taken as given), cost, militancy etc derived from local variation in workforce reproduction; itself influenced by local industrial history. Interest in unique local forms of labour often ignores a major division within labour - gender. It is argued that the social construction of gender and gender relations, like labour, are reproduced in place and thus spatially and temporally differentiated.

A comparison of women's current and historical structural position in the labour force reveals very little structural change over time, despite economic restructuring and the less spatially uneven pattern of women's paid work. Against this scenario, mainstream economic and sociological explanations for sex segregation are subjected to critiques that expose the way labour market theories take sex discrimination in paid work and gender for granted. Whilst feminists have shifted the problematic to the causes rather than effects of sex discrimination and segregation, those accounts rarely incorporate historical and/or spatial dimensions. Equally, geographers rarely encompass feminist perspectives in the analysis of socio-spatial processes. A framework is developed to synthesize these spatial and feminist perspectives so that spatial and temporal dimensions of the social construction of gender and gender relations within production relations can be embraced. Storper & Walker's notion of labour, created and reproduced in place, is placed within Young's conception of a 'gender division of labour' which, under capitalism, is the division of work and home, production and reproduction.

To illustrate variations over time and space, snapshots of two regions, the Cotton region of Lancashire and the Potteries of N. Staffordshire are analysed at two distant points in time: during industrialisation and, through case studies of industries, for the contemporary period of economic restructuring. Whilst the domestic side of the division between home and work is integral to the notion of a 'gender division of labour', the focus here is upon the spatial division of paid labour and the intra-workforce side of that equation. Further, within production,

the case studies are drawn from manufacturing activities because it is these, rather than more spatially homogeneous service employment, which still differentiate between places.

A four-way comparison along the axes of space and time demonstrates that gender construction and relations do vary within and across regions. The two study regions throw up a bewildering amalgam of attributes, whose content and gender ascription varies over time and space. These observed dynamic features is, however, the surface phenomena - the effects rather than causes. More important is the way these variations arise out of spatial variations in the pattern and mix of industries within regions and the corresponding sexual composition of the workforces that comprise these industries.

Acknowledgments

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Chapter 1

Introduction

Gender relations seem so tediously similar everywhere and for the visible historical past in that they are patriarchal in nature: patriarchy appears so monolithic, uniform and all-pervasive. Yet, at the same time, gender relations are so different over time and space. Consider: why did the suffragettes emerge in nineteenth century Lancashire, and why have there been, until very recently, such vast geographical differences between women in their level of participation in the workforce; between, for instance, women in areas like the Potteries and Lancashire with an unbroken tradition of paid work outside the home, and areas like the Welsh mining valleys where women have virtually no such tradition? Why were the former so exceptional and the latter so typical of prevailing gender relations? How do the notions of the 'Welsh Mam' and that image of the 'cocky' women of Lancashire arise?

We cannot examine all these questions here but it is clear from these few simple examples that gender relations do vary between places and over time. To look at all these variations is a massive undertaking, and in the space of one thesis, impractical. However, the aspect we can focus on is the question of why, out of all those variations in regional geography and local experience over a century and a half, there is both similarity and enormous differences between places, and over time within the same place. The examples indicate and reflect the fact that the social construction of gender itself within localities and regions, and within the workplace is part of the wider changing spatial division of labour. It is this interplay between the social construction of gender through work relations which vary between places, and the changing spatial division of labour that is of central concern in this thesis.

So, we shall be looking at two rather different places, but places in which women were an important element in the paid workforce: that is, in the cotton industry of Lancashire and the pottery industry of North Staffordshire. To illustrate temporal changes we will be looking at these two regions at two highly distant points in time, first during the period of industrialisation in the nineteenth century, and again during the contemporary period of post-war economic restructuring. These two periods were deliberately chosen as snapshots in order to capture the points in history when very large changes are taking place, and thus times when established gender constructions and gender relations based on past divisions of labour and work relations in a particular place confront a new reality. It is at such moments of flux that the bases of the social construction of gender and gender relations are likely to be at their most explicit. Such comparisons are rarely, of course, possible because most of the time things are fairly stable, but there is no pretence that the two regional snapshots are full histories of those regions; they are snapshots narrowly focussed on production relations. As 'still frames' there are limits to what can be captured within them. Periods of change bring the picture into sharper focus, but the process of change itself is difficult to encapsulate. Even so, where changes have been in progress in the contemporary period case studies, the analysis has been particularly alive to such changes and their consequences for gender relations.

The focus then in the case studies is the relationship between gender construction and the technical division of labour within important sectors in each of those regions. The Cotton Region of Lancashire and the Potteries Region of North Staffordshire were chosen precisely because historically they were regions so totally defined by their place in the spatial division of labour, but also because they were two areas where women went out to work in large numbers. It is this visibility of women in paid work that makes them unique among regions during a nineteenth century Britain which was very much a sectorally

and regionally differentiated society. The choice of two regions allows us in the final chapter to look across them and compare the social constructions of gender in each and how these are influenced by the technical division of labour.

The thesis starts out in Chapter 2, however, by looking at the structure and changes in the labour force today, noting the high degree of horizontal and vertical sexual segregation of the workforce. Whilst recent changes have had the effect of raising the level of women's participation in paid work across the country so that it is much more spatially homogeneous than it used to be, in that women in many regions are approaching rates of participation formerly unique to only a few regions, their generally weak structural position within paid work has barely changed over this century.

Against this scenario in Chapter 3 we turn to some explanations for this structural pattern of the labour market. An internal critique of each of the mainstream labour market theories is developed, but beyond this the major criticism of the labour market theses is the fact that they have taken the presence of, or potential for, sexual discrimination in the labour market and differences between males and females, as genders (rather than sexes) for granted. They have thus already input into their explanations much of what it is that needs explaining.

It was dissatisfaction with this partiality of mainstream sociological and economic explanations that also evoked the interest of feminist scholars. Out of this emerged a huge debate between feminists over the causes rather than effects of sexual discrimination. We explore that debate, mapping the contours and again developing a critique of each of the major radical, marxist and socialist feminist strands. However, two of the prime ways these theories lack power is in the absence of either a historical or spatial dimension to their analysis. To

overcome this, some of this feminist theory is linked with some of the arguments now emerging from work on the spatial division of labour and locality studies that point to the importance of the social characteristics of labour forces that are constituted in a place, because, whilst feminist theories have tended to treat space and time questions only in isolation, much of the geographical theory has ignored questions of gender. Obviously individual theorists within all these discourses do incorporate an historical, geographical or gender analysis, yet few combine all three.

Chapter 3 concludes with an attempt to construct a framework whereby the ways gender gets socially constructed over time and within particular places can be conceptualised. It is recognised, and indeed it is argued in places, that gender is constructed in a dialectical fashion within the home, the workplace and out of the relation between the two, and it is a strong background assumption throughout that this is so. Within the constraints of a thesis, however, the choice has been to focus on the spatial division of labour and the **intra-workforce** side of that equation.

Using the framework developed in Chapter 3, we embark upon the exploration of the construction of gender divisions of labour within the workplace within the two study regions and, through the snapshots, see how that has changed over time. Chapters 5 and 6 (Potteries and Cotton respectively) follow a format which first looks at the changes in workplace relations during the nineteenth century. This snapshot is followed by a picture of those regions in the contemporary period, assembled from case studies of industries that today characterise these regions. For the cotton region, of course, the textiles industry is no longer synonymous with the region, whilst the pottery industry still makes a large contribution to the characterisation of its area, and therefore the social construction of gender locally is still heavily bound up with the gender relations

within the pottery industry. The four-way comparison that this format permits between, on the one hand, the two regions in the nineteenth century and the same regions during the twentieth century, (the spatial division of labour) and on the other hand, within each region over time (the historical dimension) allows us in Chapter 7 to pull out the similarities and differences of gender construction along the axes of space and time.

A major conclusion is that although gender attributes change over both space and time (an observation that belies the kind of biological determinist assumptions lurking behind many of the labour market theories that view gender attributes as natural, fixed and immutable) the one constant is that genders are always constructed in relation to one another and that this always occurs in such a way that constructions of masculinity, no matter how they are composed and irrespective of their actual social content, are everywhere and always ascribed as socially superior. This is despite the fact that what is 'masculine' or 'feminine' may be markedly different in content from place to place, or may even contradict the antecedent constructions from which they are derived. Gender relations are social relationships and constructions of gender are therefore as many and various as the social contexts within which they are shaped.

Chapter 2

Labour Force Changes

2. THE NATIONAL CONTEXT

The post-war years in Britain have witnessed drastic changes in employment. This has not been a simple matter of changes in the levels of labour demand and supply; both the nature and distribution of employment have been substantially altered.

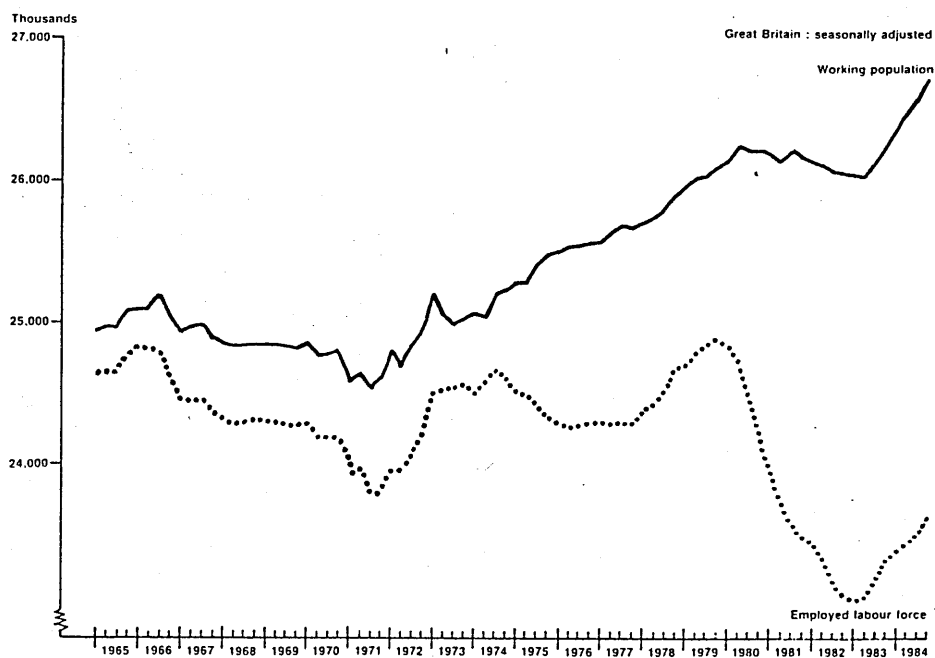
Certainly, in the immediate post-war years employment more or less kept pace with the expansion of population of working age. A growing number of this expanding population have, however, been seeking work. In 1984 there were 33.7 million people in Britain of working age¹ whilst the working population in September 1984 stood at 26.7 million²: 4 million more than in 1951 and 2 million more than in 1965. The growth in the working population has come from an upsurge in the number of women either in or looking for work: up from 7 to 11 million between 1951 and 1984, whilst the male labour force remained relatively static at around 15-16 million over the same period.

As Fig. 2.1 (below) shows, the employed labour force began to drop following the onset of decline in manufacturing during 1966, but the real watershed occurred in the decade 1971-81. Employment peaked in 1979, but suffered a rapid decline thereafter until March 1983, by which time some 2 million jobs (8.2%) had been lost. Since 1978 this trend has been marginally counterweighted by a rise in service employment but, as Fig.2.2 demonstrates, this merely served to slow down rather than reverse the trend toward overall employment decline, which gathered momentum again after 1981.

¹Employment Gazette, May 1987:253

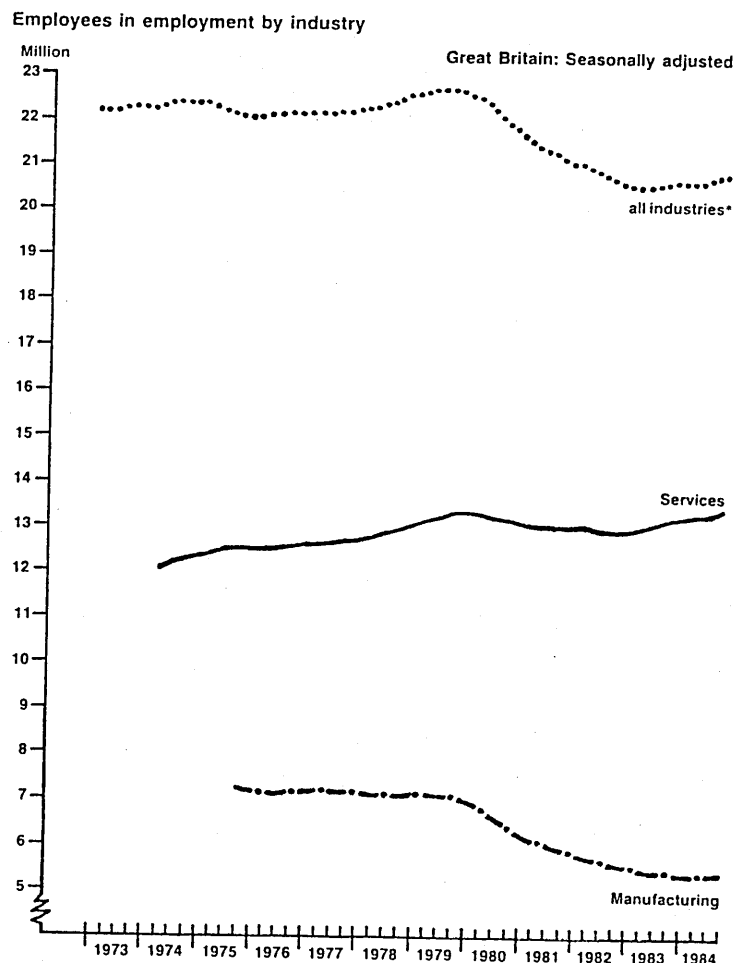
²Employment Gazette, April 1985, 93:4 Historical Supplement No. 1.

Figure 2.1: Working Population & Employed Labour Force



[Source: Employment Gazette 93:4, April 1985, Historical Supplement No. 1]

Fig. 2.2: Trends in Employment in Great Britain 1965-85



[Source: A G Champion et. al., 1987]

2.1: The Nature of Change

As suggested above, these changes have not simply been the outcome of a fall in labour demand at a time of increasing supply; the number of employees in employment over the past twenty years or so has in fact remained fairly stable around the 22 to 23 million mark. Apart from the increased number of women entering the labour force and the shift in sectoral composition from manufacturing to services, there has also been a rise in the number of self-employed; mostly men. These gender and sectoral changes in the composition of the workforce, have been accompanied by major changes in the location of jobs, the occupational structure

and employment relations, with more part-time, temporary or short-term contract and home workers. It is to these aspects of employment change that we now turn.

2.1.1: Sectoral Change

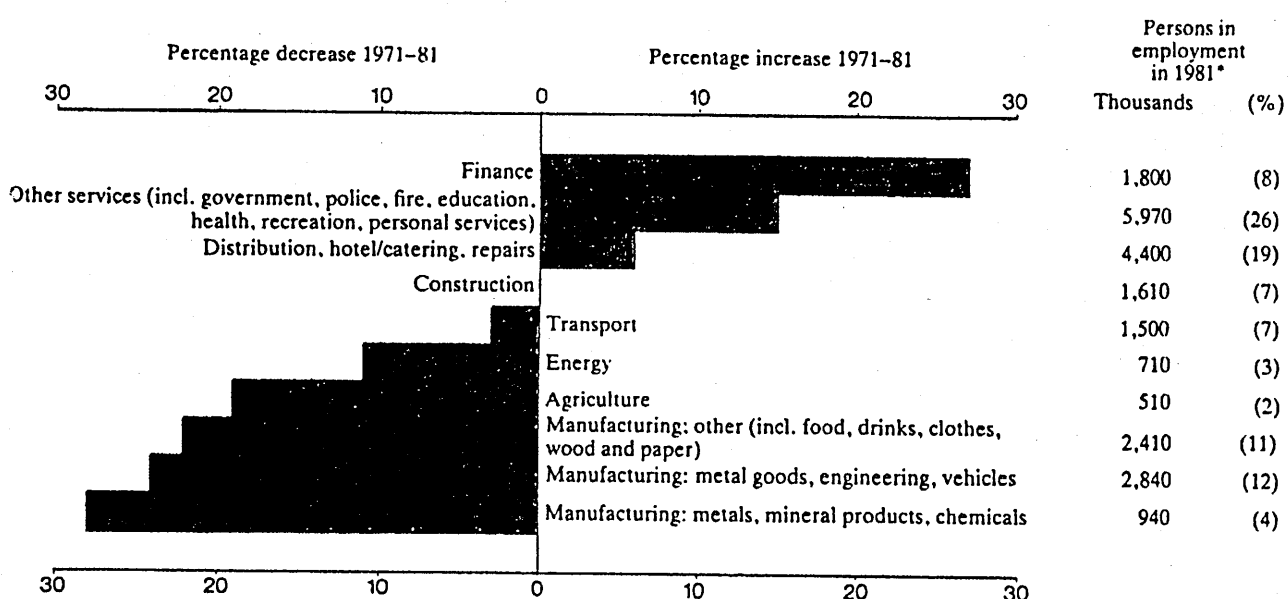
The detail of employment shift from manufacturing to services is presented in Table 2.1 and Figure 2.3, from which it is clear that, without exception, all Orders of the 1968 Standard Industrial Classification (SIC) outside the service industries experienced employment decline to a greater or lesser extent, principally in the manufacturing activities of textiles, metal manufacture, and clothing & footwear, all of which lost at least one third of their workforce between 1971-81, followed by primary production activities and construction. By contrast, the service sector displayed an overall growth in jobs, but these increases nowhere nearly matched the spectacular decline of other Orders. Within this, however, Damesick (1986) has demonstrated that the pattern in services has been somewhat uneven. The public sector has been a source of both growth and decline in employment. *Public utilities* and *Transport & Communication* both showed employment losses over the 1971-81 period, as did *Public Administration & Defence*, yet *Professional & Scientific Services* grew largely as a consequence of expansion of health and education services, accounting for half the total net increase in service industry jobs between 1971-77 (Table 2.1). This public growth was short-lived, for between 1978-81 private sector services showed a faster rate of growth. Paramount among these was the *Insurance, Banking, Finance and Business Services* Orders (1968 SIC) which accounted for 87 per cent of the total growth of full-time employment in private services. More recently, since 1983, it is these private producer and consumer services which have continued

Table 2.1
GB Employment Change by industry 1971-81 (1968 SIC)

Sector and SIC (1968) Order	Employed 1971 (000s)	Percentage change		
		1971-78	1978-81	1971-81
<i>Primary production</i>	812	-11.1	-6.2	-16.6
I Agriculture, forestry and fishing	419	-11.1	-8.3	-18.4
II Mining and quarrying	393	-11.2	-4.0	-14.7
<i>Manufacturing industry</i>	7,886	-9.7	-16.2	-14.7
III Food, drink and tobacco	744	-8.1	-7.6	-15.0
IV Coal and petroleum products	44	-13.9	-4.3	-17.6
V Chemicals and allied industries	435	0.7	-11.1	-10.5
VI Metal manufacture	556	-16.4	-31.7	-42.9
VII Mechanical engineering	1,038	-11.5	-11.5	-21.7
VIII Instrument engineering	164	-9.6	-9.0	-17.8
IX Electrical engineering	799	-6.0	-10.0	-15.4
X Shipbuilding and marine engineering	183	-6.0	-18.8	-23.5
XI Vehicles	807	-7.4	-18.9	-24.9
XII Other metal goods NES	572	-6.2	-21.6	-26.4
XIII Textiles	581	-21.3	-29.7	-44.7
XIV Leather, leather goods and fur	46	-18.9	-16.0	-31.9
XV Clothing and footwear	429	-16.3	-24.8	-37.0
XVI Bricks, pottery, glass and cement	301	-14.1	-17.9	-29.5
XVII Timber, furniture, etc.	264	-4.8	-15.1	-19.2
XVIII Paper, printing and publishing	589	-8.6	-7.4	-15.3
XIX Other manufacturing	331	-3.2	-21.2	-23.7
Construction (Order XX)	1,222	-0.1	-8.0	-8.1
<i>Service Industries</i>	11,718	12.3	1.0	13.4
XXI Gas, electricity and water	369	-10.5	2.4	-8.3
XXII Transport and communication	1,545	-5.7	-3.0	-8.6
XXIII Distributive trades	2,555	6.3	-1.2	5.1
XXIV Insurance, banking, etc.	963	23.0	9.6	34.9
XXV Professional and scientific services	2,916	22.8	2.6	26.0
XXVI Miscellaneous services	1,906	23.2	6.3	31.0
XXVII Public administration and defence	1,465	5.4	-9.9	-5.0
Great Britain	21,638	2.7	-5.1	-2.5

[Source: Champion, A G et. al: 1987]

Fig. 2.3: Percentage change for persons in employment by industry division, 1971-81, Great Britain



[Source: OPCS: Population Trends; 1984]

to exhibit faster growth but, as a glance at Tables 2.2 and 2.3 below will show, the recent spurt by these areas of service activity have never been sufficient in magnitude to maintain the limited counterbalancing effect that the service industries in their entirety have been able to muster in the face of continued losses in manufacturing and other sectors. As can be seen from Table 2.2, the total change in all service employment amounted to just over 2 million between 1971-84, whilst Table 2.3 reveals that the combined losses of manufacturing and other sectors between the years 1979-85 alone totalled 2,213,000. The bulk of this was in manufacturing with a total of 1,729,000 with 'other' sectors contributing losses of just under half a million.

Table 2.2
GB Service Employment Changes 1971-84 (SIC 1980)

	1971-77		1977-84		1971-84	
	000s	%	000s	%	000s	%
All services (SIC 1980)	1318	11.6	684	5.4	2002	17.6
Wholesale & repairs	70	7.3	119	11.5	189	19.6
Retail distribution	99	5.1	46	2.2	145	7.4
Hotels & catering	176	25.4	133	15.3	309	44.7
Transport	-75	-6.9	-152	-14.9	-227	-20.8
Postal services & telecommunications	-24	-5.5	7	1.7	-17	-3.9
Banking, finance, insurance, business services	178	13.5	359	24.0	537	40.7
Public Administration	205	11.8	-122	-6.3	83	4.8
Education	288	22.8	-18	-1.2	270	21.4
Medical & health services	207	22.0	144	12.6	351	27.4
Other services	193	19.7	176	15.0	369	37.7

[Source: Damesick, P J : 1986]

Table 2.3
British Employment 1979-85

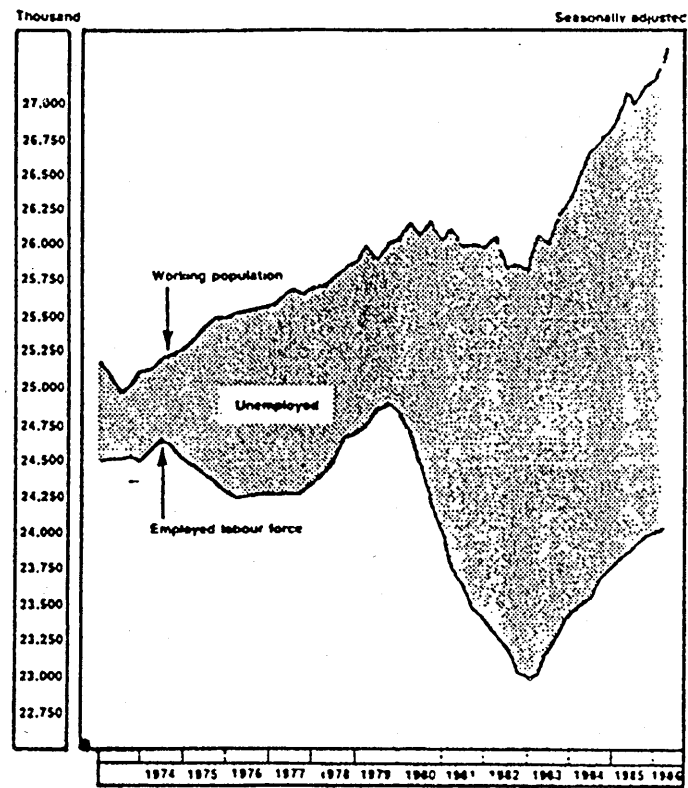
	Total employed labour force ¹	Employees				Self employed ³
		Total	Male	Female		
				Full- time	Part- time ²	
Recession: Sept 79–Mar 83	–2,032	–2,310	–1,579	–698	–33	278
Recovery: Mar 83–Sept 85	907	465	–129	94	500	443 ⁴

[Source: Martin R: 1986]

The latest Census of Employment (1984) shows little marked change from the above scenario. The employed labour force continues to rise, but this continues to be offset by the rate of increase in the working population (Fig.2.4). Within this latter, however, women were now accounting for a smaller proportion of the overall increase due to a much smaller than estimated increase in part-time female employees, combined with an unexpected rise in the rate of increase for male part-

time workers; an increase of 53,000 between September 1981 and September 1984, though more recent estimates predict that the rise will be more modest in the following years. During 1986 the average rate of decrease of employees in employment in manufacturing accelerated. The average monthly reduction was 14,000 as against 2,000 the previous year. The total reduction between March 1983 and June 1986 was 323,000, whilst the overall increase in services is now estimated at 1,043,000, roughly a ratio of 3:1, over the same period.¹ Fig.2.5 overleaf shows the continued divergence between manufacturing and non-manufacturing employment for the period 1973-1986.

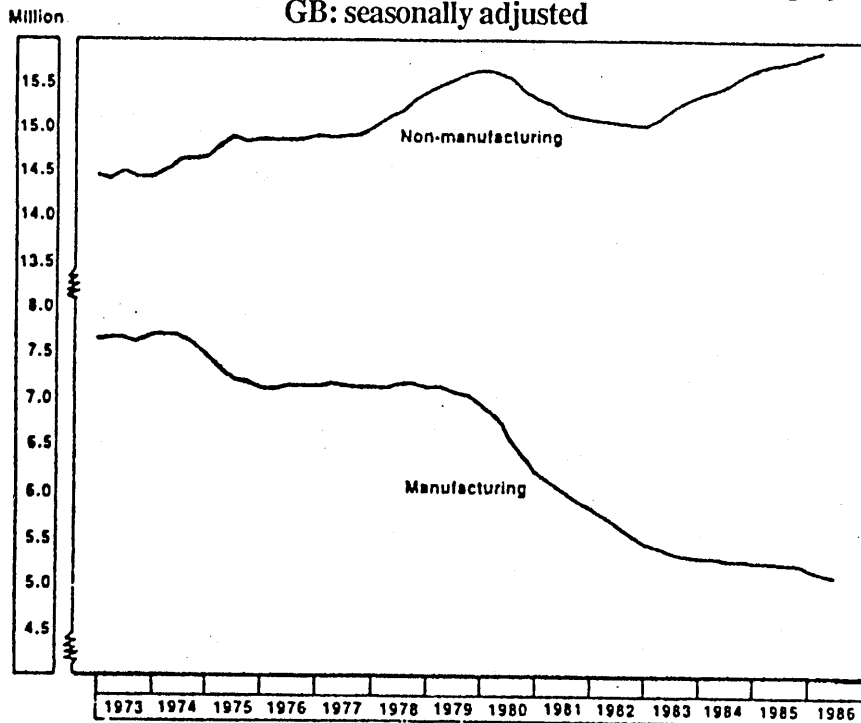
Fig. 2.4: Working Population and Employed Labour Force: GB



[Source: Employment Gazette, January 1987]

¹Employment Gazette, January 1987

Fig. 2.5: Manufacturing and non-manufacturing employees in employment
GB: seasonally adjusted



[Source: Employment Gazette, January 1987]

There are important riders which qualify this apparent overwhelming shift to service employment. Firstly, the distinction between manufacturing and services in official statistics is, as Damesick (1986) has pointed out, to some extent an arbitrary one, reflecting a wider academic debate on the definition and structure of service industries¹ whilst examination of trends over time is further confused by the changes in 1980 to the Standard Industrial Classification. Secondly, the apparent increases in service job growth are tempered somewhat when account is taken of the fact that a sizeable proportion of this increase has been in part-time jobs, as Fig.2.6 documents. Moreover, whilst it is clear more people are now engaged as indirect workers (not directly producing a physical output) to some extent the growth in service industries reflects an externalization of servicing activities formerly carried out within manufacturing establishments, making the real extent of decline and growth in these sectors difficult to determine.

¹Allen J "Service industries : a reappraisal" Open University, Faculty of Social Sciences, mimeo (1986)

**Fig.2.6: Full-time & part-time employees in employment: by
broad industry group (GB)**

	000's		
	1971 ¹	1981 ²	1984 ²
All industries and services			
Males-full-time	12,840	11,511	11,741
-part-time	584	718	
Females-full-time	5,467	5,304	4,972
-part-time	2,757	3,781	4,172
Total industries and services	21,648	21,314	20,885
Manufacturing industries			
Males-full-time	5,475	4,242	3,916
-part-time	71	69	
Females-full-time	1,869	1,352	1,199
-part-time	471	395	361
Total manufacturing	7,886	6,058	5,477
Service industries			
Males-full-time	5,261	5,460	6,155
-part-time	473	601	
Females-full-time	3,418	3,752	3,584
-part-time	2,206	3,288	3,708
Total services	11,358	13,101	13,449

1 As at June.

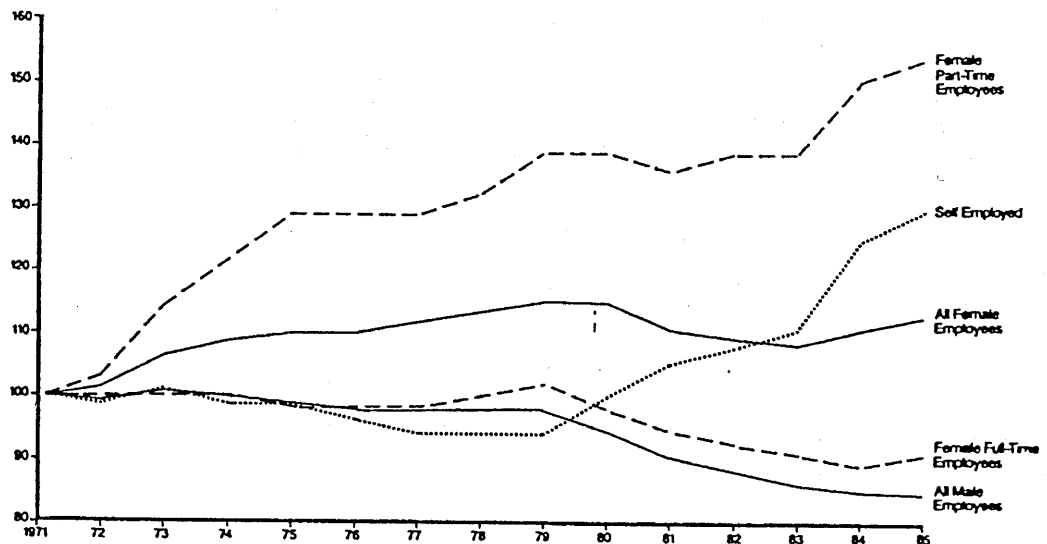
2 As at September.

[Source: Social Trends, 1987]

2.1.2: The Self Employed

Self-employment contrasts with the overall trend for employees in employment. Levels dropped slightly between 1971 and 1979 but in the following six years to 1985 it rose substantially; from 7.4 to 10.6% of the employed labour force (Social Trends: 1987). The steepest rise occurs after 1983, when the Enterprise Allowance Scheme was introduced; much of it due to single person businesses, without employees (Figure 2.7 overleaf).

Fig. 2.7: Self-Employment Trends : Great Britain 1971-1981[1971=100]



[Source: EOC: 1986]

The overwhelming majority of the self-employed (roughly three quarters) are men, but since 1981 women have swelled their proportions by 5 per cent to account for 25 per cent of the total in 1985. Nevertheless, as Table 2.4 below indicates, the increase in male self-employment between 1983 and 1986 was double that of females, whilst self-employment as a whole accounted for virtually half of the increase in the employed labour force between those years. By September 1986 there were just over 2.5 million self-employed: almost 2 million men and 642,000 women.

Table 2.4
The Employed Labour Force in Great Britain : 1986

											Thousand	
Seasonally adjusted		Employees in employment					Self-employment			Employed labour force		
		Male		Female		All	Male	Female	All	Male	Female	All
		All	Of which part-time*	All	Of which part-time							
1983	Mar	11,706	na	8,823	3,713	20,529	1,651	496	2,147	13,663	9,334	22,997
1984	Sept	11,636	771	9,142	3,884	20,778	1,868	596	2,464	13,816	9,755	23,571
	Dec	11,683	801	9,207	3,937	20,890	1,886	606	2,493	13,881	9,829	23,710
1985	Mar	11,697	792	9,255	3,962	20,952	1,905	617	2,522	13,912	9,888	23,799
	June	11,703	822	9,296	3,993	20,998	1,923	628	2,550	13,935	9,939	23,874
	Sept	11,683	808	9,338	4,031	21,022	1,926	629	2,554	13,919	9,983	23,901
	Dec	11,684	832	9,374	4,052	21,058	1,929	630	2,558	13,920	10,020	23,939
1986	March	11,655	819	9,406	4,094	21,061	1,932	631	2,563	13,893	10,053	23,946
	June	11,654	852	9,435	4,116	21,090	1,935	631	2,567	13,895	10,083	23,978
	Sept	11,658	855	9,464	4,130	21,122	1,950	642	2,592	13,915	10,122	24,037
Change Mar 1983 — Sept 1986		-48	na	+641	+417	+593	+299	+146	+445	+252	+788	+1,040

* The estimates for male part-time employees are not seasonally adjusted.

● excludes HM forces

[Source: Employment Gazette, April 1987, 1986 Labour Force Survey]

The geographical spread of the roughly half a million growth in the self-employed has not been as uneven one might expect (Table 2.5). Yorkshire & Humberside, the North West and Wales shared the rapid growth of the South East and East Anglia; all experiencing increases in excess of 20 per cent in the numbers of self-employed.

Table 2.5
The geographical distribution of the self-employed, by region

	Total employed labour force ¹		Employees in employment		Self employed ²	
	000s	%	000s	%	000s	%
South East	349	(4.5)	171	(2.4)	178	(24.4)
East Anglia	46	(5.9)	25	(3.7)	21	(22.3)
South West	47	(2.7)	28	(1.9)	19	(8.9)
West Midlands	30	(1.4)	13	(0.7)	17	(9.6)
East Midlands	24	(1.5)	9	(0.6)	15	(9.6)
Yorkshire and Humberside	32	(1.6)	15	(0.9)	47	(27.8)
North West	70	(1.5)	21	(0.9)	49	(21.8)
North	12	(1.0)	17	(1.6)	5	(5.5)
Wales	28	(2.6)	1	(0.1)	29	(23.0)
Scotland	36	(1.1)	18	(0.9)	18	(10.1)
Great Britain	650	(2.8)	252	(1.2)	398	(18.4)

Notes: 1. Excludes HM Forces.
2. With or without employees.
Source: Department of Employment.

[Source: Martin : 1986]

Martin (1986:468) suggests that this growth has served to offset geographical imbalances in the recovery of employee employment, but when account is taken of the male/female breakdown by region, it becomes clear that in the majority of cases these declining regions have also been areas where female self-employment has tended to rise faster¹. Service expansion, which tends to absorb female labour, has been slowest in precisely these regions. It is women rather than men then that have tended to contribute to the levelling out of regional disparities by joining the self-employed.

¹See Employment Gazette, April 1987, '1986 Labour Force Survey & revised employment estimates' Table 12.

The principal areas of self-employed activity are concentrated in the distribution, hotels, catering and repairs industries, construction, other services and agriculture (Table 2.6).¹ In two of these, *other services* and *distribution, hotels, catering & repairs*, women are found in greater proportions than their share of the self-employed as whole (25%). A more striking feature, however, is the number of women found in the *other manufacturing* and *mineral extraction* industries. Here, they make up almost one third of the self-employed in these industries, though these are among the three lowest levels of self-employed activity. Unfortunately, the low-level of disaggregation of the data for the self-employed obscures which areas of manufacturing activity, if any, women are concentrated, preventing any meaningful comparison with the known pattern of concentration of women in manufacturing who are employees in employment.²

Table 2.6
Self-employed by industry (GB)

	1971	1975	1981	1983	1984	Thousands		
						1985		
						Males	Females	Total
Agriculture, forestry, and fishing	282	247	250	246	249	220	28	249
Metal goods, engineering, and vehicle industries	35	39	46	46	49	50	3	53
Energy and water supply industries ²	—	—	1	1	1	109	45	154
Extraction of minerals and ores other than fuels, manufacture of metal, mineral products, and chemicals	4	5	7	8	9			
Other manufacturing industries	90	97	93	95	125			
Construction	342	362	388	409	464	457	12	469
Distribution, hotels, catering, and repairs	725	680	698	701	796	527	262	790
Transport and communication	65	77	99	92	118	98	6	103
Banking, finance, insurance, business services, and leasing	148	157	188	214	226	206	53	259
Other services	261	268	288	348	401	250	217	467
All industries and services	1,953	1,932	2,057	2,160	2,435	1,918	625	2,543

1 As at June each year.

2 Includes coal mining.

[Source: Social Trends: 1987]

This gender distribution pattern in self-employment marks no radical departure

¹For a direct comparison of Table 2.6 with employees in employment by industry, see Social Trends 1987, Table 4.8. Note, however, Table 2.6 refers to GB and the latter to the UK.

²Shown in Figure 2.10 below

with the structure of occupational segregation found among employees in employment, as we shall later see.¹

2.1.3: Part-time Work

One area where women clearly predominate is in part-time work. A glance back at Fig.2.7 shows that whilst female employment overall rose from 1971 against the prevailing trend of a contracting employed labour force to 1983, it is part-time employment by women that has had the most significant impact, though male part-time workers did increase by 19.8 per cent between 1971 and 1981 (Townsend:1986).

As already mentioned, the recovery period from 1983 was characterised by a growth in service employment as well as a rising level of self-employed. Men's enjoyment of the recovery has largely been confined to this latter category since male employees in employment went on falling, even after 1983. Women, on the other hand, have gained as employees; predominantly as part-time workers, but also managing an upturn in their full-time numbers, (as Table 2.7 below shows) whilst Figure 2.6 (above) clearly indicates that female part-time workers accounted for the greatest part of the overall increase in employment in services with a rise from 2.2 million to 3.7 million (72 per cent) in their numbers between 1971 and 1984².

¹See later discussion of Hakim's work in the discussion following Figure 2.16 below.

²This is not to say that there has been no expansion of male employment in service industries; there clearly has, especially in the area of business and financial services.

Table 2.7
Employment Change in Britain, by group, 1979-85 [000's]

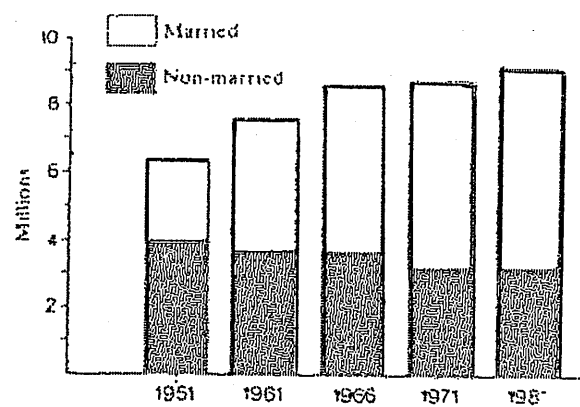
	Total Emp'd Labour Force	Employment				Self- Emp'd
		Total	M All	F F/T	F P/T	
Recession Sept 79 to Mar 83	-2,032	-2,310	-1,579	-698	-33	278
Recovery Mar 83 to Sept 85	907	465	-129	94	500	443

[Source: Martin:1986]

- Notes: 1. Excludes HM Forces
2. Not working more than 30 hrs a week
3. With or without employees
4. Estimates of numbers of self-employed after mid 1984 are provisional.

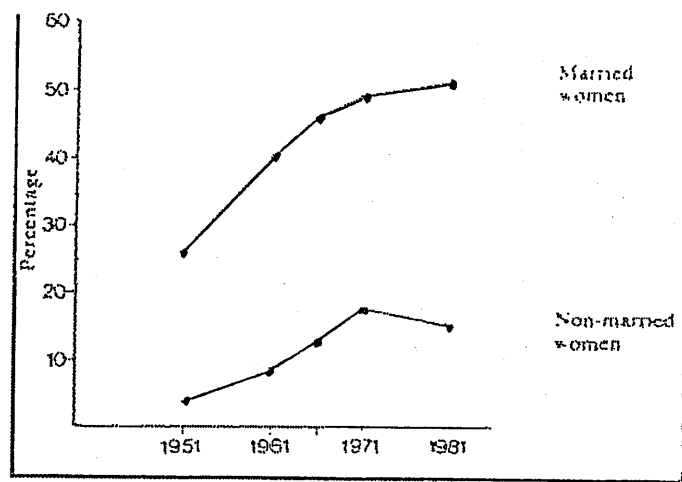
A large and growing proportion of part-time workers are married women. Figures 2.8 and 2.9 demonstrate that the number of working women as a whole rose in the post-war years from 6.5 million to just over 9 million, and that married women's share of female part-time employment roughly doubled in this period from around 25 to 50 per cent.(Fig 2.9). They make up 45.1 per cent of the workforce in *Hotels & Catering*, 33 per cent in *Miscellaneous Services*, 32.3 per cent in *Professional & Scientific Services*, and 27.1 per cent in *Retail Distribution and Repairs*. This heavy concentration of female part-time labour in service industries differs slightly from the pattern of horizontal segregation characterising their full-time sisters, where the greatest concentrations are split between the manufacturing and service sectors; comprising 61 per cent of *Footwear, clothing and leather* workers; 39.3 per cent of the *Banking, Finance, Insurance, Business Services and Leasing* workforce, followed by *Textiles* (38.3%) and *Professional and Scientific Services* (37.9%).

Fig.2.8: Women in employment, 1951-1981 (GB)



[Source: Population Trends, Autumn 1984]

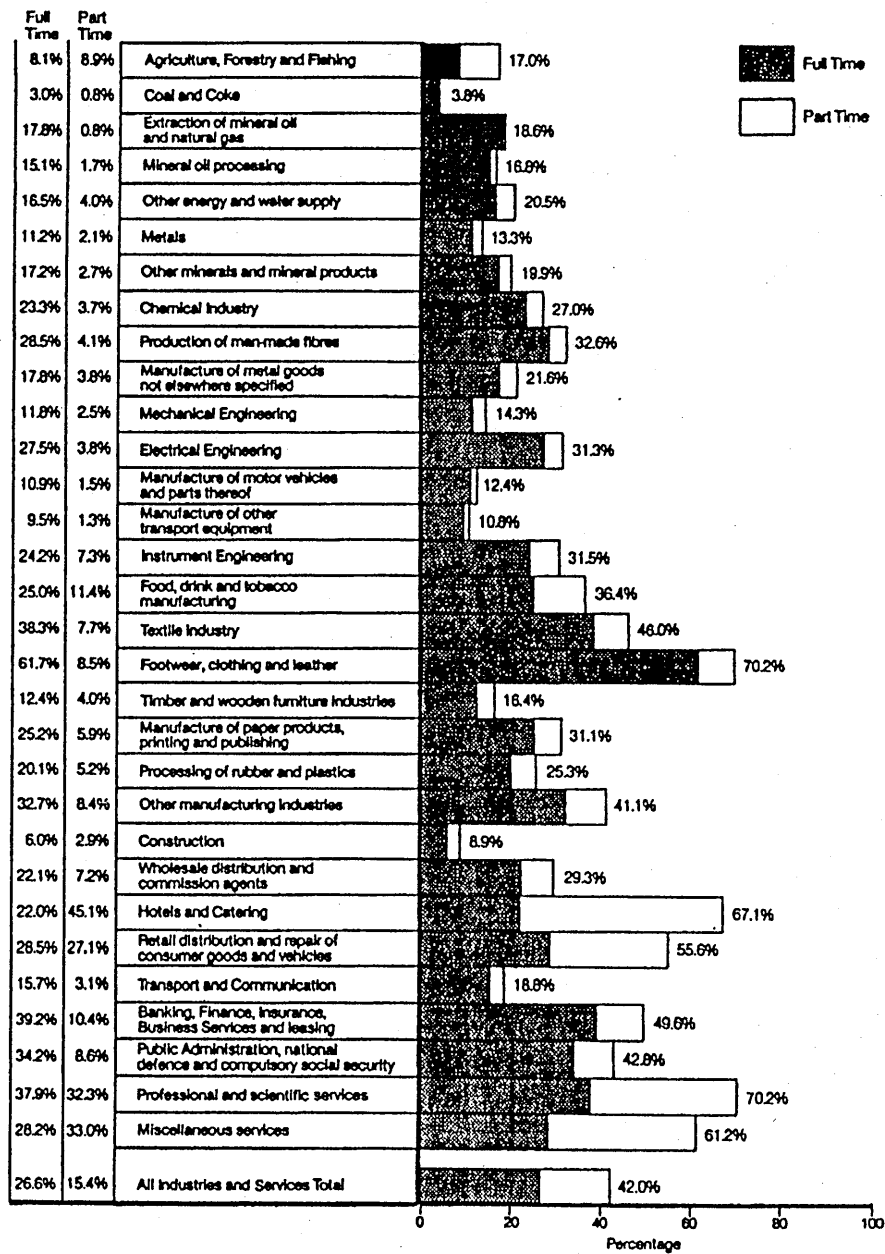
Fig.2.9: Proportion of women working part-time, 1951-1981 (GB)



[Source: Population Trends, Autumn 1984]

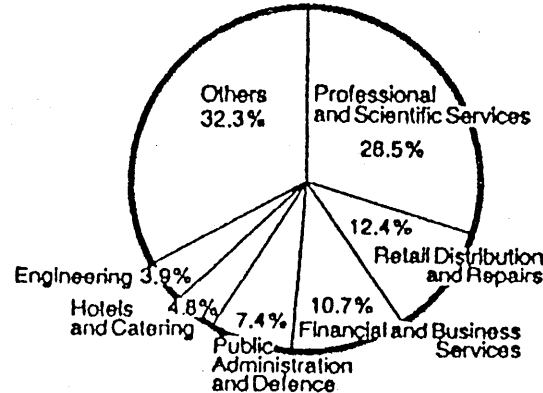
Figure 2.10 breaks down full and part-time women's labour as a percentage of the industrial labour force as well as showing the overall contribution of women workers to individual industries. The importance of service employment for women workers can readily be seen from Figure 2.11, which shows the distribution of women across all industries. This industrial pattern does not significantly differ for full and part-time women (Figs 2.12 and 2.13), but the **kinds** of jobs each perform in these industries does differ widely (Figs 2.14 and 2.15), with full-time women workers overwhelmingly employed in non-manual occupations (principally *clerical and related*) whilst part-time women are more likely to find themselves in low-paid manual jobs (such as *catering and cleaning*), comprising 53.6 per cent of workers in these occupations. More importantly, the industrial breakdown of women's work outlined in Figure 2.10, below, belies the fact that women find themselves in a few particular occupations **across all industries**.

Fig.2.10: Women as a percentage of industrial labour force 1985 (GB)



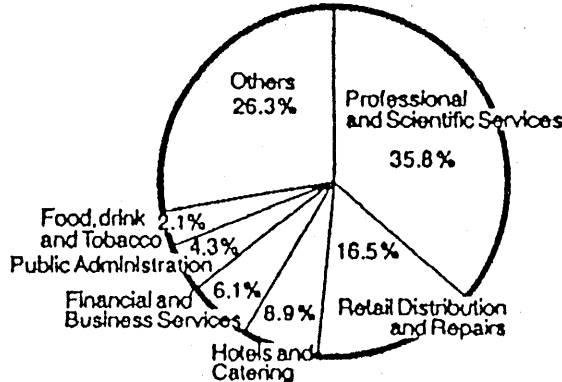
[Source: EOC, Eleventh Annual Report (1986)]

Fig.2.11: Distribution of all women workers between industries, 1985 (GB)



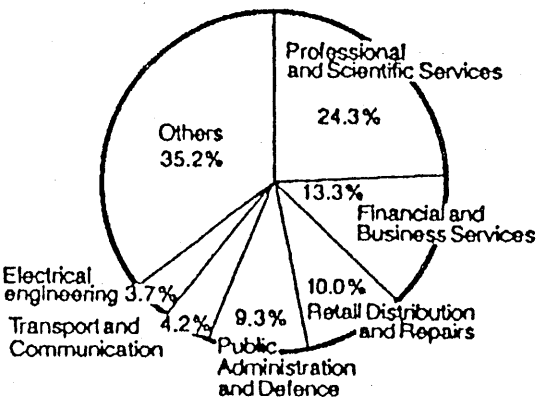
[Source: EOC: Eleventh Annual Report, 1986]

Fig.2.12: Distribution by industry of women workers: part-time, 1985 (GB)



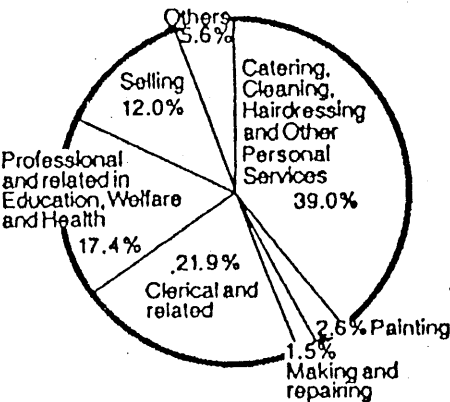
[Source:EOC: Eleventh Annual Report, 1986]

Fig.2.13: Distribution by industry of women workers: full-time, 1985 (GB)



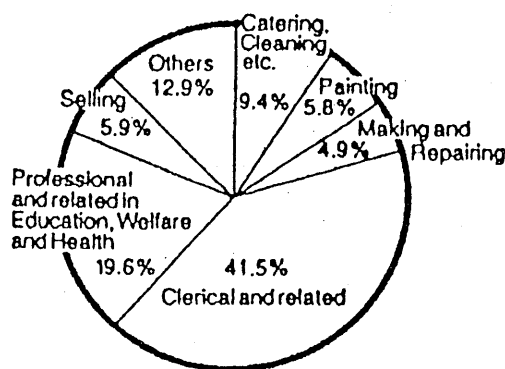
[Source: EOC: 1986]

Fig.2.14: Distribution of Women Workers by Occupation: part-time : 1985 (GB)



[Source: EOC: 1986]

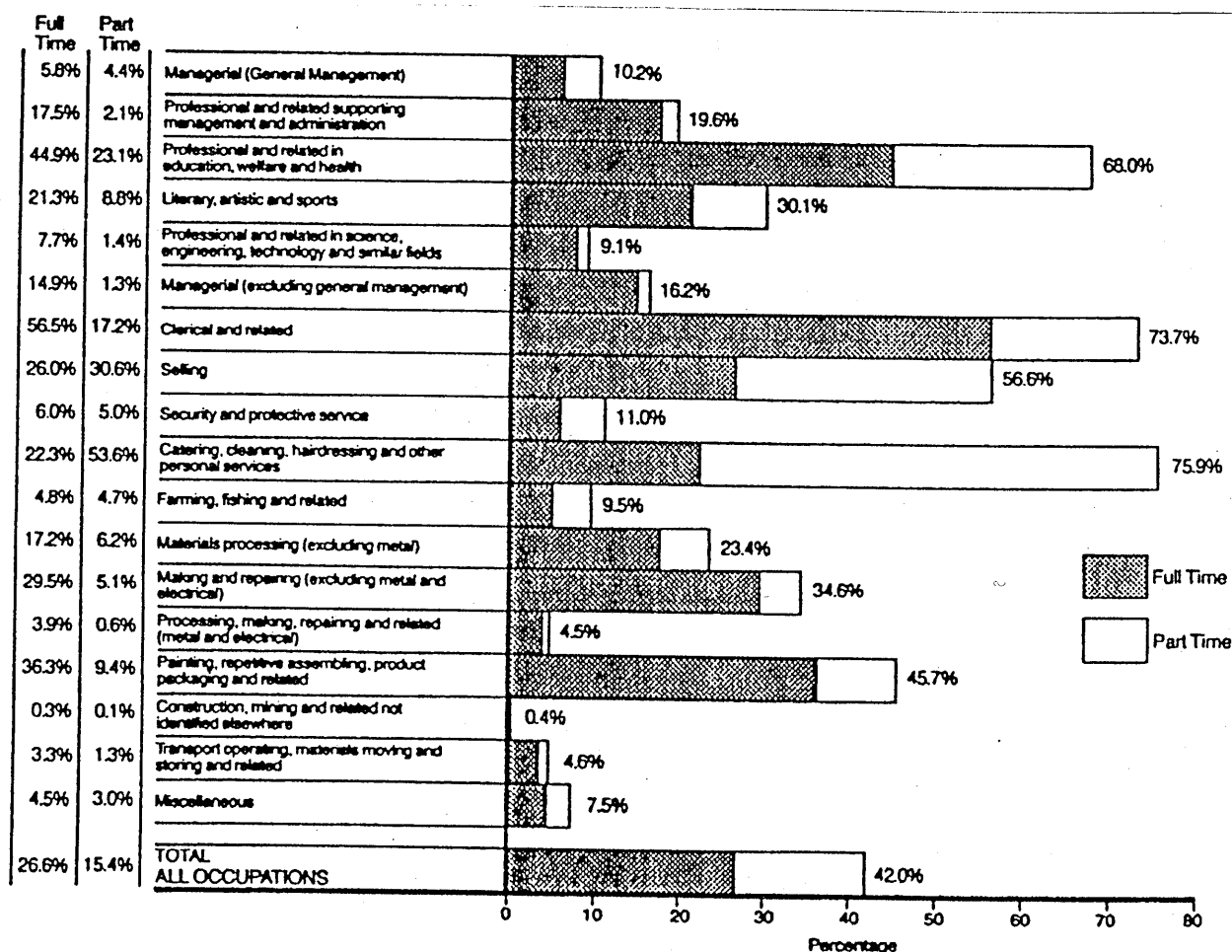
Fig.2.15: Distribution of Women Workers by Occupation: full-time: GB 1985



[Source: EOC: 1986]

Figure 2.16 reveals that there is a fairly clear segregation of the labour force into distinct occupational groups along gender lines. This occupational segregation is particularly marked in service type occupations where men are poorly represented in jobs with elements that are supportive in nature: clerical, cleaning, catering and caring occupations such as education, welfare and health. Female employment in the last three sectors often reflects women's role under the domestic division of labour. Thus, for example, in education they are concentrated in the teaching of very young children; in health in roles mirroring the work they perform at home as cooks, cleaners, nurses or in jobs that support a predominantly male medical profession as radiographers, physiotherapists, or in administrative roles.

Fig.2.16: Women as a percentage of occupational labour force: GB, 1985



[Source: EOC: 1986]

As Hakim notes, total occupational segregation would be an extreme case in contemporary Britain: "as it requires that formal and direct mechanisms are at work to ensure that all entrants to given occupations are of one sex only" (1979:19)¹. Contemporary legislation on Equal Pay and Sex Discrimination obviously act as limiting and constraining influences. Historically, this has not always been the case. Direct and formal mechanisms have been used by many male professional and working class organisations to prevent women from entering their

¹Though mining and construction, as Fig. 2.16 shows, approach this extreme.

occupational ranks. This is not to suggest that the present pattern of occupational segregation has its direct antecedents in those actions. Paradoxically, many occupations now colonised by women were formerly dominated by men; clerical work is a prime example. Similarly, many former exclusively female occupations are now primarily the province of men - brewing, baking, and spinning.¹ It all depends where one places the historical benchmark. The historical point is in fact *not the point*. The point is that gender-based occupational boundaries do sometimes shift and any single snapshot is unlikely to convey the ongoing **active process** that is frozen in the still frame of time that we use to reference history.

There are two other features of post-war labour market changes that remain to be discussed; the more prevalent use of temporary and short-term contract workers and homeworking. Some authors point to a third more recent kind of change in the labour market in the existence of paid and unpaid work outside the formal economy altogether (Pahl:1980:1984) and Gershuny (1979a:1979b). The growth in part-time workers has been the smallest sub-group in the expansion of what Hakim (1987) identifies as the "flexible" workforce - those not in full-time permanent employment. According to Hakim, throughout the 1980's there has been 'a steady and consistent decline' in the relative size of the permanent workforce, from 70 per cent of all in employment in 1981 to 66 per cent in 1985, by which time the "flexible" workforce consisted of just over 8 million workers, or 34 per cent of all in employment.(1987:93)². The most dramatic expansion of this growing sector of the workforce has come from those in temporary work.

¹So strongly was this linked to women that unmarried women to this day are referred to as 'spinsters' and women receiving parish relief in the eighteenth century were provided with a spinning wheel, so essential was it regarded to their livelihood. (Pinchbeck: 1981:133)

²See Hakim (1987) for the changing ratios of "flexible" to permanent workforce during the eighties.

2.1.4: Temporary Work

There is little extensive information on temporary workers. The Department of Employment's annual Labour Force Survey supplies estimates, and this is supplemented by a few surveys carried out by the Institute of Manpower Studies (IMS) and the Office of Population & Census Surveys.¹ The picture is confused by the lack of consistent and clear criteria for defining temporary workers among the various studies. As Meager states, there is no unambiguous demarcation in British law between permanent and temporary workers (1986:8). An IMS set of 20 case studies found more skilled and professional workers tended not to be directly employed, but where they were, it was often working under a fixed-term contract. By contrast, lower skilled and unskilled manual workers tended to be concentrated in less secure and more uncertain forms of temporary work arrangements, and with less control since they were either directly employed or employees of employment businesses: classic examples of the former might be contract cleaning, refuse disposal and catering firms, and the latter temporary agencies providing clerical and secretarial support services.

The IMS work identifies three principal influences on the levels of temporary working. Firstly, the economic cycle (temporaries serving as employment ballast to be jettisoned in business downturns); secondly, structural changes: the shift to services, traditionally a larger user of temporary labour and, lastly, new recruitment practices to achieve greater flexibility. This last was, according to the IMS, of primary importance during the recent recession but, more recently, a combination of all three operating in the same direction underlies increasing levels of temporary work.

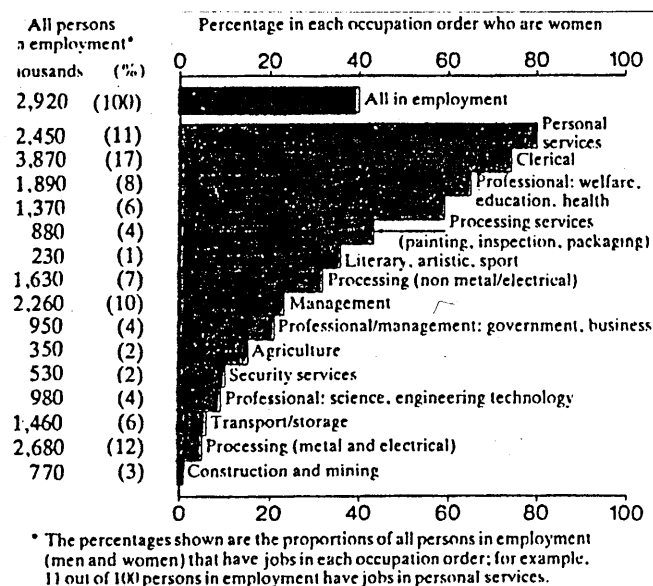
As shown in Table 2.8, women alone account for recent increases in temporary working. Further, as the data shows, the entire increase between 1983-85 is attributable to part-time working. The overwhelming majority of temporary

¹Meager, N (1986) 'Temporary Work in Britain' in *Employment Gazette* (January) and Atkinson, J S (1985) 'Flexibility: planning for an uncertain future' in *Manpower Policy & Practice*, Vol.I (summer) [IMS Surveys].

workers are women and two thirds of them, compared with one third of men, were working part-time in 1984 (EOC;1986:23) Men's numbers, however, have marginally decreased as a consequence of a lowering of full-time numbers not being matched by a compensatory rise in their part-time total between 1983 and 1985. Conversely, women even managed an increase in their full-time total, whilst simultaneously being responsible for two thirds of the part-time increase.

This is hardly surprising considering temporary jobs are concentrated in service occupations with relatively high concentrations in the education professions, literary, artistic, sports, sales and personal service occupations, doing semi-skilled or unskilled manual work, such as catering and cleaning, and clerical work (Social Trends; 1987:75). It is in these areas that women are concentrated, as Figure 2.17 indicates, though a small but growing proportion are engaged in managerial, technical and professional work (Meager:1986).

Figure 2.17: Proportion of Women in each occupation order, 1981 (GB)



[Population Trends; 1984:13]

Table 2.8
Temporary Working: by sex, 1983 and 1985

	Great Britain		Thousands and percentages	
			Males	Females
	1983	1985	1983	1985
Employees and the self-employed in temporary jobs (thousands) ¹				
Full-time	368	334	169	182
Part-time	180	215	519	581
Total	553 ¹	550	700 ¹	764
As a percentage of all employees and the self-employed				
	4.1	4.0	7.6	7.8

¹ Includes those who did not state whether full or part-time

[Source: Social Trends:1987]

Meager (1986) reports little variation in the use of temporary workers across broad industrial groups or geographical regions, though the type of work did show regional differences. More significant, according to Meager, was their

concentration in 'vanguard' organisations - large and faster growing companies. The new rationales for employing temporaries uncovered by the IMS study by Meager et al¹ suggests why temporaries may be attractive to such companies.

The IMS study's most notable finding was the identification of new rationales for using temporaries. Traditional rationales have been to cover for special, short-term or one-off events such as sickness, maternity, special and new projects and shortages in skills among permanent staff, whilst the new ethos reflects an attempt to cope with rapid changes and uncertainty in the business environment.² The most important rationale was the avoidance of permanent recruiting in the face of uncertainty over future employment levels followed by avoidance of future redundancy costs. For a still fewer number of employers it signified a recognition of the real costs of permanent staff in recruiting, training, and benefits or entitlements such as pensions and holidays. These newer rationales were more in evidence in the industrial sector most exposed to the chill wind of change - manufacturing - though neither here nor in services did they dominate traditional reasons (Meager: 1986).

Clearly, for individual employers there are advantages to be gained, but as Meager concludes, the growth of temporary work may represent an overall mis-allocation of resources, in creating a divergence between private and social costs:

"It might, for example, be argued that in expanding the use of temporary workers, employers are shifting to the state (and to households) the costs not only of training, but of income support for those workers during the "troughs" in company workloads. Thus the net social benefits to the economy of an increase in temporary work may be less than the sum of the benefits to individual employers."(1986:12).

¹See footnote on p30.

²Large and faster-growing companies, some of whom may be only small in size, often display a high risk gearing in their investment activities.

2.1.5: Homeworking

Estimates of the level of homeworkers and their proportions in the 'flexible' workforce are based on the National Homeworking Survey carried out in Autumn 1981 (Hakim:1987). This special survey yielded a national estimate of 1.88 million in Great Britain or just over one quarter of the 'flexible' sector. Whilst the fact of working at or from home makes this group atypical of the flexible sector as a whole, they do nevertheless "exhibit all the characteristics of the 'flexible' workforce and may be regarded as more broadly illustrative ... than any other single group taken in isolation" (Hakim:1987:94). This is primarily due to the fact that the home-based workforce encompass "large numbers of nominally self-employed people as well as tiny one-man businesses, part time workers, people with temporary and casual jobs, and some short-term contract jobs" (ibid).

This overlapping and the difficulty of teasing out the different sub-groups of the flexible workforce into clearly-bounded categories makes for some double-counting in estimating the size of any individual sub-group. The data used here are based on the 1981 special survey, and will not agree with those publicised in the Department of Employment's Labour Force Surveys (LFS), which Hakim suggests, inadequately sift homeworkers. Like temporary workers, and some self-employed and part-time workers, homeworkers are difficult to define. National estimates can thus vary widely by virtue of only small differences in definition. The special survey, by contrast, was designed to include distinct sub-groups: those working **at home**, and those working from **home as a base**, and features the 100,000 homeworkers with a single employer, as well distinguishing the broad kinds of work homeworkers do. It thus provides the most detailed information on homeworkers to date.

The Survey comes up with some surprising findings. It overturns the popular image of homeworkers as ethnic minority women, performing unremitting toil at low-skill, low-paid work in less than satisfactory conditions, with little or no protection of health, safety or employment rights, contradicting the image that has emerged from the plethora of studies conducted in the mid-seventies by the Low Pay Unit and others (Brown:1974;Crine:1979;Jordan:1977):

"...homeworkers are more highly qualified than most, in better health than most, more likely to own their own homes, and their usual occupations may be more skilled than is reflected in their homework job."(Hakim, 1987:104)

Of even greater interest is the gender differences among the home-based workforce. The vast majority of homeworkers were women (71 per cent) whilst men were equally likely to be working from home as a base at 71 per cent. Whilst the entire home-based workforce displayed great diversity in being spread across all industry groups and 13 of the 15 main occupational groups, those working from home as a base had no concentration in any particular kind of work, compared with homeworkers.

However, the sharpest difference between men and women is in the number of hours they work with important corollaries for other aspects of their employment conditions. Women mostly worked shorter hours, and had much shorter lengths of service than men, thereby disqualifying many women for redundancy payments, sickness benefit, unemployment benefits and paid holidays. They were also among the lowest paid and had the lowest levels of job security; men, conversely were among the best paid and had fixed term contracts.

These findings lead the Survey to conclude that hours and not sex discrimination by employers are responsible for sex differences. In the narrowest sense this is true, but this ignores the wider evidence of the Survey which points to why

women find themselves predominantly in the generally lower status homeworker category, working shorter hours than men. Shorter hours were directly and exclusively attributed to child care responsibilities. Whilst the Survey dispels the notion that fewer women than supposed are *in fact* trapped into working at home by child care - only one third, (conversely two thirds of men were working from home **out of preference**) - it fails to link these facts to the later observation that women were trading-off flexibility against the reality for many of low-paid jobs **outside** the home (Hakim, 1987:104). The wider reality of many women's lives and the constraints this imposes on opportunities in the labour market as a whole receives less weight than it justifies. The Survey fails to set that reality within the context of the labour market as a whole to which men and women stand in a different relation. Had it done so, greater light would have been shed on why women **need** to trade flexibility with other factors, or why there is such a sharp contrast between relatively immobile women homeworkers and relatively mobile male workers using the home as a base.

To summarise, restructuring in recent post-war history has been far from a simple re-allocation of a relatively stable labour supply which has shifted the economic emphasis from a manufacturing to a service base. Crucially it has marked changes in the level and character of labour demand such that the labour force has undergone a metamorphic transformation of its basic nature: there are now over 8 million people in Britain belonging to the "flexible" workforce; that represents a staggering one third of all those in employment. The sorts of flexible work outlined here are not the only forms; there has also been a trend towards more job sharing, particularly in the public sector and, within the homeworking sector, the appearance of an elite composed of management and professional consultants using microcomputer technology.¹ New patterns of structuring the working day

¹A new development involving mainly men has been teleworking by management and professional employees, specially prevalent among software houses where consultants and analysts are linked by telephone to the company's mainframe computer. IBM has recently been experimenting with this form of work. (Evans & Attew:1986).

by introducing shift systems that allow flexible days and hours, compressed working weeks, and new ways of organising an individual's working life through sabbaticals and career breaks for educational or training purposes are also emerging (Curson:1986).

Male recruitment into some domains of the flexible sector such as part-time or temporary work marks relatively new ground for them but, as far as one can glean from the meagre and disparate data available for individual domains of this sector, it appears that men have, at least in some areas, secured the highest ground. For instance, temporary work, as we saw, is characterised by a dual structure that can be likened to what labour market theorists identify as primary and secondary labour markets, with women concentrated in lower paid, less skilled, more highly scrutinised jobs with comparatively less security than men. A similar case could also be made for the home-based workforce where the greater likelihood of higher pay, full-time working and less reliance on a single employer for men mitigates the insecurities associated with this sub-sector of the flexible workforce, thus mirroring defining features of primary labour markets. Remember, however, that the difficulties mentioned in teasing out different employment statuses from official statistics means research on individual sub-sectors has been unable to bring the flexible workforce into sharp focus. Despite this blurred picture, it is nevertheless sufficiently clear that the force of post-war change has had a differential effect on the sexes. Crudely, in numerical terms, men have suffered the most heavy casualties as a direct consequence of the demise of British manufacturing, whilst women, especially married women, have increased their presence in the employed labour force primarily through part-time work. Table 2.9 depicts the apparent simple exchange in the post-war economic activity of men and women, which has led many commentators to infer new potential for economic equality for women.

Table 2.9
Change in Activity Rates 1951-81: Men & Women (GB)

	1951	1971	1985	1951-71	Changes 1971-85	1951-85
MALES	87.6	80.6	74.0	-7.1	-6.5	-13.6
FEMALES	34.7	43.9	48.7	+9.2	+4.8	+14.0

[Compiled from Social Trends, 1987, Table 4.3 and Joseph, G, 1983 Table B]

This impression is nevertheless misleading for, as we have seen, entry into the labour force for the vast majority of women has not been an unambiguous gain. On the whole they have been recruited to those restructured areas of the economy characterised by lower skills and poorer terms and conditions of employment. This is not, however, a question of job allocation by sex to a restructured labour market - rather that market has been the outcome of a process of industrial restructuring which has been sensitive to the attributes and socio-spatial divisions within labour. Despite the depletion of the male workforce, however, recruitment to the service sector and entry into the flexible workforce has been a markedly different experience for men. In services they have tended to occupy the higher echelons of the occupational structure, as a glance back at Figure 2.10 confirms, whilst the positions they occupy in the flexible workforce contrasts with women's experience of flexible working. For men it has tended to offer flexibility for themselves rather than their employer. For all the apparent restructuring and the greater presence of women in the labour force this has presaged, the narrow post-war focus serves to obscure the fact that the position of women in the labour force has in fact remained relatively stable since the beginning of the century, as the following discussion of the longer historical perspective reveals.

2.2.: The Historical Position of Women in the Labour Force

Women's participation rates around the turn of this century were far lower than today. In 1881 the participation rate for all women stood at 33.9 per cent, compared with 43.6 per cent in 1971. The enormous growth in the number of married women entering the labour force in the post-war period noted earlier¹ in fact represents the continuation of an almost uninterrupted trend which stretches back to 1911; the first Census to record women's marital status. There was a slight hiccup in 1921, undoubtedly as a consequence of the expulsion of women who had been engaged in war work during World War I, but between 1931 and 1951 their rate more than doubled from 10 to 21.7 per cent, and has grown at a more steady pace ever since (Joseph:1983:127). The recent focussing on the post-war boom in married women's work by some commentators is then hardly the unprecedented phenomenon it is purported to be. In reality it is a phenomenon with its antecedents in the inter-war years. This protracted growth over the past century has not signalled a corresponding improvement in the structural position of women within the workforce. Granted, occupational categories have changed over time, but whilst women are certainly doing different kinds of work today than they formerly did, the underlying reality is that they are still concentrated in both a narrow spectrum of the occupational structure, and within a narrow range of industrial groups. Joseph (1983) has demonstrated this persistent sexual segregation of occupations since the middle of the last century. Traditional employment in clothing and textiles for women has given way with the decline in manufacturing to a new concentration in the distributive trades and the professional and scientific service industrial groups. Miscellaneous services was the most important Group in 1841 for women; 55 per cent of this Group being engaged in domestic service.² Over one hundred years later the position of women is not

¹Refer to p15

²See Table 4.1 in Joseph (1983:136)

dissimilar. Domestic service has all but disappeared¹ but a comparison of the principal occupations for the female workforce between 1911 and 1971 shown in Table 2.10 below demonstrates that many kinds of work formerly performed by women under domestic service are no less women's work in contemporary times.

Table 2.10
Principal Occupations of the Female Workforce (England & Wales)
1911-1971

<i>Occupational Groups</i>	<i>Percentage of all employed</i>					<i>Percentage of women workers in each group for 1971</i>
	<i>1911</i>	<i>1931</i>	<i>1951</i>	<i>1961</i>	<i>1971</i>	
Private domestic servants	26.1	20.7	5.7	3.8	2.2	83.8
Clothing workers	14.0	9.4	7.2	5.5	3.6	80.0
Textile workers	13.5	11.1	6.5	4.0	1.9	53.8
Laundry workers	3.5	2.0	1.5	1.0	0.7	77.4
Clerks, typists	3.0	10.2	20.3	25.4	27.3	71.1
Shop owners, managers and assistants	9.3	10.9	12.0	13.3	10.8	60.0
Waitresses, cooks and kitchen hands; maids and domestic staff in hotels & schools	3.2	4.5	7.8	7.1	7.0	82.9
Metal workers (including electrical & electronic)	2.2	3.2	6.0	5.5	4.4	11.0
Charwomen etc.	2.6	2.5	3.4	4.4	4.5	86.0
Nurses	1.7	2.5	3.3	3.7	4.3	91.4
Teachers (school)	3.8	3.2	2.9	3.7	4.1	63.6
Packers and bottlers	-	1.8	2.1	2.2	2.4	72.9
Hairdressers	0.1	0.6	0.7	1.4	1.4	78.3
Total for above occupations	82.9	82.6	79.4	81.0	74.6	53.7 (68.5)*

*excludes metal workers

[Joseph:1983:142]

Catherine Hakim's work (1978 and 1981) represents the most thorough analysis of occupational segregation available: both horizontal: "where men and women are most commonly working in different types of occupation" and vertical: "where men are most commonly working in higher grade occupations and women most commonly in lower grade occupations, or vice versa." She shows that for the

¹Though there is mounting evidence to suggest traditional forms of domestic service may be on the increase, though no reliable measure of the trend is available.

period 1901-1971 "there has been no decline, rather a small increase, in the occupational concentration of women over the century"(Hakim:1978:1264).. As Table 2.11 highlights, the percentage of non-female occupations only dropped in the last decade of the period 1901-1971, but that occupations in which women are over-represented (at over 70% of the workforce) has actually risen from 9 to 12 per cent.

Table 2.11
Occupational Concentration 1901-1971

	Total number of occupations identified at each census	Proportion (%) of all occupations which have:			
		No women workers	70% or more women workers	A higher % of women workers than in labour force	A higher % of men workers than in labour force
1901	360	9	9	26	74
1911	475	13	9	27	73
1921	611	8	8	22	78
1931	591	8	8	23	77
1941	—	—	—	—	—
1951	567	6	11	28	72
1961	201	9	10	25	74
1971	223	2	12	26	74

Note: The number of jobs with no male workers is negligible: two in 1901, three in 1911, one each in 1921,31 and 51 and none at all in 1961 & 1971. The all female jobs in question are midwives, nursery nurses and charwomen.

[Source: Hakim; 1978:]

The proportions of typically male or female occupations since 1901, despite minor fluctuations, stands unchanged. Indeed, over that seventy year period the likelihood of working in an occupation dominated by one's own sex increased for men. In 1901 almost half of all men were in all-male jobs, compared to only 11 per cent of women in all-female jobs. Women had only two exclusive preserves remaining by 1921, whilst in 1971 the majority of men could still find themselves in occupations where they outnumbered women 9 to 1, compared to only a quarter

of women being able to claim an equal ratio in their favour so that: "Male inroads into women's preserves have not been counter-balanced by women's entry into typically male spheres of work" (1978:1266). Nevertheless, over the century, there has been a slow decline in the degree of female over-representation in disproportionately female occupations.¹ However, even when taken together with a fall in the degree of female under-representation in typically male occupations over the same period, this has still been insufficient to significantly effect the overall degree of horizontal segregation, with only a tiny decline being recorded over the seventy year period (Hakim; 1978:1266).

The pattern of vertical segregation over the same period is one of greater segregation. Men bolstered their presence among skilled workers, whilst women increasingly found themselves among the unskilled and semi-skilled. Table 2.12 presents the picture between 1911 and 1971. It clearly shows the feminization of white collar work. In clerical, shop and sales work the proportions of women were broadly in line with their contribution to the labour force as a whole in 1911, but by 1971 almost three-quarters of all clerical workers were women, and a clear majority of sales personnel and shop assistants were female. In the higher status white collar occupations their presence actually dropped between 1911 and 1961, though an updated article by Hakim (1981) shows that the gain in ground appearing in 1971 continued throughout the 1970's. However, even this recent upsurge has failed to reverse the overall trend towards greater vertical segregation. This rigidity stems from the deleterious effects of the onset of recession between 1977 and 1979 which wiped out the rapid reversals of the early 1970's following the introduction of the Equal Pay and Sex Discrimination Acts (Hakim; 1981:525-6).

¹Disproportionately female occupations were those where women formed a greater proportion in an occupation than they did in the labour force as a whole.

Table 2.12
Women workers in major occupational groups 1911-1971
 Female workers as a percentage of all workers in each of the major occupational groups

Occupational Groups	1911	1921	1931	1951	1961	1971
Employers & proprietors	18.8	20.5	19.8	20.0	20.4	24.9
White collar workers	29.8	37.6	35.8	42.3	44.5	47.9
(a) managers and administrators	19.8	17.0	13.0	15.2	15.5	21.6
(b) higher professionals	6.0	5.1	7.5	8.3	9.7	9.9
(c) lower professionals and technicians	63.9	59.1	58.8	53.5	50.8	52.1
(d) foremen & inspectors	4.2	6.5	8.7	13.4	10.3	13.1
(e) clerks	21.4	44.6	46.0	60.2	65.2	73.2
(f) salesmen and shop assistants	35.2	43.6	37.2	51.6	54.9	59.6
All manual workers	30.5	27.9	38.8	26.1	26.0	29.4
(a) skilled	24.0	21.0	21.3	15.7	13.8	13.5
(b) semi-skilled	40.4	40.3	42.9	38.1	39.3	46.5
(c) unskilled	15.5	16.8	15.0	20.3	22.4	37.2
Total occupied population	29.5	29.5	29.8	30.8	32.4	36.5

[Source: Hakim; 1978:Table 6]

Note: This table is itself based on Table 3 in G S Bain and R Price (1972) which gave data for 1911-1961, and which Hakim updated to 1971 with modifications to their method, which she details in the source article.

Despite increasing numbers of women entering the labour force and recent legislation designed to change the attitudes of employers and the aspirations of women themselves to work, the paltry decline in horizontal segregation has been overwhelmingly eclipsed by an unabated rise in vertical segregation, so that overall: "it is wrong to believe that the position of women in the labour force has steadily improved over the century - on the contrary it has deteriorated quite markedly in some respects" (Hakim; 1978:1267).

Finally, Table 2.13 shows that almost two million women work in occupations with a 90% plus female workforce, as typists, secretaries, maids, nurses, canteen assistants and hand or sewing machinists. There are two points to note here. With the exception of secretarial and clerical work, these occupations mirror those

predominantly performed by women under domestic **service** in the early part of this century and reflect the unpaid work women still perform under domestic labour in contemporary times. This last observation has been one of the primary insights behind the recent feminist challenge to established labour market theory.

Table 2.13
Number of Women in Occupations with 20,000 or more employees
(Excludes occupations with less than 26 per cent women workers)

	Percentage of employees who were women:			
	26-50	51-75	76-90	91+
Clerks, cashiers		1,406		
Typists, secretaries, shorthand writers				715
Shop assistants			686	
Maids and related service workers				391
Charwomen, office cleaners			376	
Nurses				352
Primary & secondary school teachers		285		
Canteen assistants, counter hands				272
Sales managers	210			
Hand and machine sewers				206
Packers, labellers		197		
Office machine operators			135	
Hairdressers, manicurists			113	
Cooks		112		
Kitchen hands			93	
Telephone operators			86	
Waitresses		71		
Barmaids		70		
Launderers, dry cleaners			61	
Electrical assemblers			61	
Service workers n.e.c.*	61			
Teachers, n.e.c.*	54			
Food processors n.e.c.*	52			
Inspectors (electrical and metal goods)	52			
Cloth makers n.e.c.*		47		
Production process ovrkers	44			
Laboratory assistants & technicians	44			
Cutters, sewers, lasters		42		
Printing workers n.e.c.*	40			
Restaurateurs	38			
Social welfare workers		38		
Tailors, dressmakers		38		
Pressworkers and stampers	32			
Domestic housekeeprs				31
Textile workers		29		
Housekeepers, matrons			28	
Bakers, pastry cooks	28			
Paper product makers		26		
Publicans and inn keepers	25			
Winders and reelers		23		
Craftsmen n.e.c.*	23			
Hotel & boarding house managers & proprietors		23		
Workers in plastic	23			
Hospital orderlies	23			
Professional workers n.e.c.*	22			
Knitters		21		
Total in listed occupations	794	2,382	1,662	1,967
Per cent of female labour force	10%	29%	20%	24%

NOTES: *n.e.c. Occupations that could not be classified in the more specialised categories of work within each occupational group.
Hakim does not date the table from which this data is drawn, but footnotes indicate this is compiled from the 1971 Census.

[Source: Hakim; 1978:Table 8]

2.3 The spatial effects of labour force changes:

In contrast to the abundance of research into the social changes wrought by restructuring at a national level, knowledge of local effects has, until very recently, been rather meagre. However, several works of the early 1980s demonstrated the case for research into how local conditions produce locally unique outcomes in articulation with national economic processes of change. Murgatroyd and Urry's (1983) Lancaster study, Cooke's (1981) highlighting of spatial variation in class structure and similarly Urry's (1981) article together with Massey's (1983) work all established that wider processes did not simply wash over undifferentiated space in a uniform manner, but that the local social and economic impact was crucially affected by the unique local conditions the forces of change confronted.

These processes are beginning to be documented from the findings of initiatives such as the ESRC localities research programme, but this at best gives a patchy coverage (see Cooke, 1986). Of course, comprehensive inter-regional analyses for **specific** indices of economic change are available, such as Townsend's (1986) mapping of the growth of part-time employment. Rarely, however, is this contemporary pattern interrogated against the historical role regions have had within the spatial division of labour. Such a historical perspective implies that the process of change will be spatially contingent. Hitherto, spatial comparability at one level of analysis has often been at the expense of a deeper examination of the crucial historical backdrop against which contemporary changes are taking place. Locality studies have begun to compensate for this lack of temporal dynamic but, due to the different and incompatible information gathered by the various research groups, these seem unlikely to supply information of a cumulative nature. This work attempts to overcome some of these pitfalls by locating the empirical understanding of the two study regions within their particular historical contexts,

as well as within the wider and more general context of contemporary economic change.

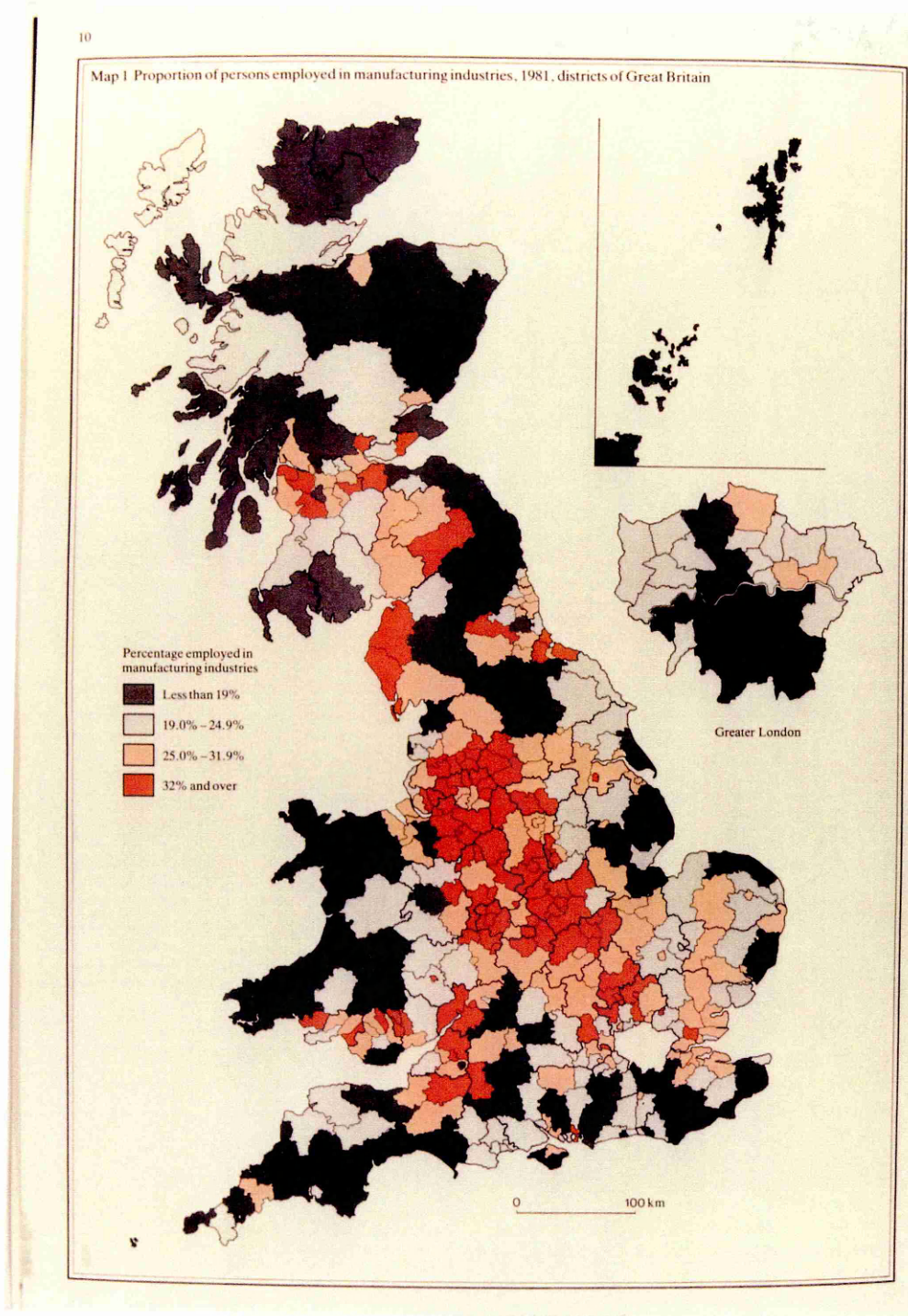
The earlier sections have mapped the contemporary structure and trends within the GB labour market as a whole, and placed the profound changes in the participation rates and forms of women's employment within a historical perspective from which we saw that there has been no radical change in the nature of their paid work, nor, crucially, any profound shift away from their historically weak structural position within the labour market: their occupational segregation into relatively low-skilled, low-paid and low status jobs persists. From this benchmark of national trends the following sections change the spatial resolution to explore the picture for the regions within which the study areas lie.

The post-war shift toward a service-based economy, in concert with many western economies, and the accompanying decline in manufacturing that has, in scale at least, been unique to Britain, has had a differential impact on the regions (see Figures 2.18 and 2.19). Both manufacturing decline (Figure 2.18) and service growth (Figure 2.19) have had a specifically spatial form which in the long term has produced the now well-documented North/South divide. Essentially losses in manufacturing of devastating proportions have focused to the North and West, whilst service growth, although a more spatially uniform phenomenon, has concentrated in the South and East of England where, unlike regions with a strong manufacturing base, it has more than compensated for employment decline in non-service sectors¹. Figure 2.20 graphically depicts the North/South boundary and marks the first tentative indication of where the North West and West Midlands regions (that contain the Cotton and Potteries study areas), lie in the new geographical distribution of employment that has emerged since the 1970s. They are, as you can see, among the only regions to experience a *net loss* of

¹The exception is the picture for the SE region, complicated by the experience of London.

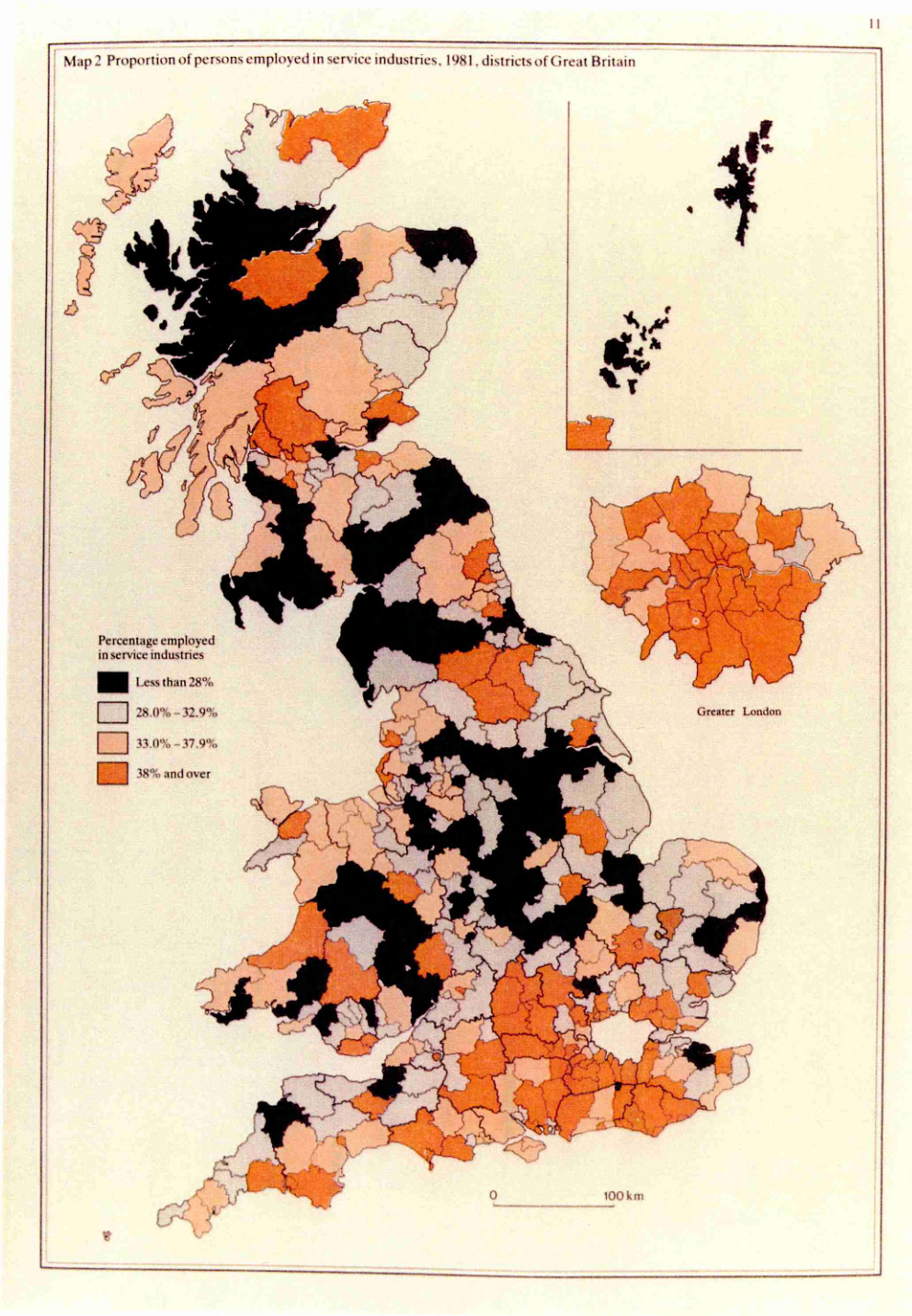
employment in the service growth/manufacturing decline equation, along with the SE, the Northern region and Scotland..

Figure 2.18: Proportion of Persons employed in manufacturing industries, 1981



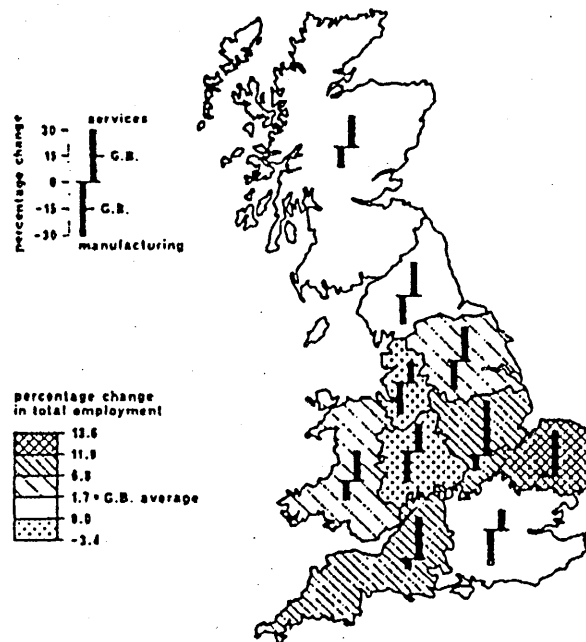
[Source: Population Trends, Autumn 1984]

Figure 2.19: Proportion of Persons employed in service industries, 1981



[Source: Population Trends, Autumn 1984].

Figure 2.20: Regional Employment Change 1971-80



[Source: Lloyd & Reeve 1982]

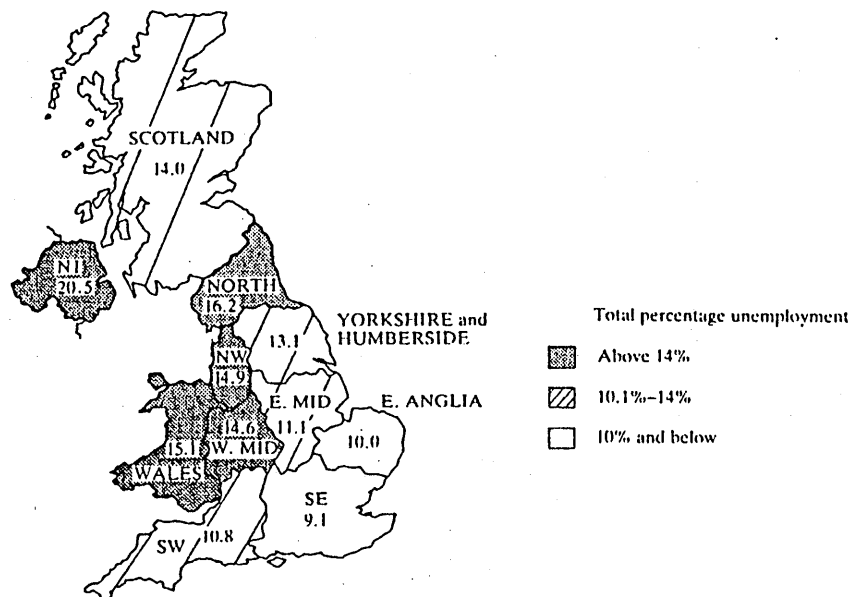
There are two principal operators behind this picture. The first has been the continued decline of traditional manufacturing in the heavy industrial areas in combination with the onset of decline in the mid 1960s of the newer engineering-based industries that had their genesis in the aftermath of the 1930s depression. There were distinct spatial divisions of labour associated with these 'first' and 'second' wave industries and hence a clear geographical pattern to the process of decline. Added to the collapse of traditional and heavy industry in the North and West that gave birth to the 'regional problem', came the subsequent losses of the sixties and early seventies in the newer 'second wave' activities based in the Midlands and South East. By the 1980s, though, the effects of manufacturing decline were more geographically even. Even so, at the turn of the decade, during 1980 and 1981, the hardest-hit manufacturing industries were textiles and metal

manufacture; the staples of the North West and West Midlands respectively (Massey & Meegan:1982).

On the other side of the equation, the pattern of service growth has likewise been uneven. As Figure 2.20 (above) illustrates, the outcome for the overall geographical distribution of employment has largely been a function of how far service employment has compensated manufacturing losses. During the 1970s, gains in service employment in both the study regions failed to keep pace with manufacturing decline, especially so in the North West.

The product of this deindustrialisation equation, however, has been even more spatially specific than this regional panorama suggests since the worst effects have been most acute in the large industrial cities that lent their character to the regions in which they were situated. It was specifically the large industrial cities that failed to enjoy the growth in service employment. This growth was largely an ex-urban affair whilst such established aspects of service employment as the large cities did possess, such as transport and distribution services, went into decline in the early 1980s at the same time as newer service employment was mushrooming outside them, with cataclysmic results for places like Liverpool.. The manufacturing losses in the cities have thus been compounded by losses in declining areas of service employment, with the result that the benefits from the more uniform growth in education and health during the 1970s have been most heavily tempered in precisely those areas most desperately in need of the countervailing effects of service employment growth. The processes of deindustrialisation have resulted in a re-jigging of the 'regional problem' except this time the symptoms are not confined to black spots and irritations in isolated regions at the extremities, but appear as a rash affecting the top half of Britain. The most profound aspect of this has been the changing geographical face of unemployment shown in Figure 2.21.

Figure 2.21: Total Unemployment : the regional pattern, October 1983



[Source: Massey:1985]

The spatial outcome of the equation is clearly discernible in the spatial pattern of unemployment. Despite the depletion of London's manufacturing base, growth in the rest of the South East has undoubtedly counterweighted those losses to a greater extent relative to other regions.

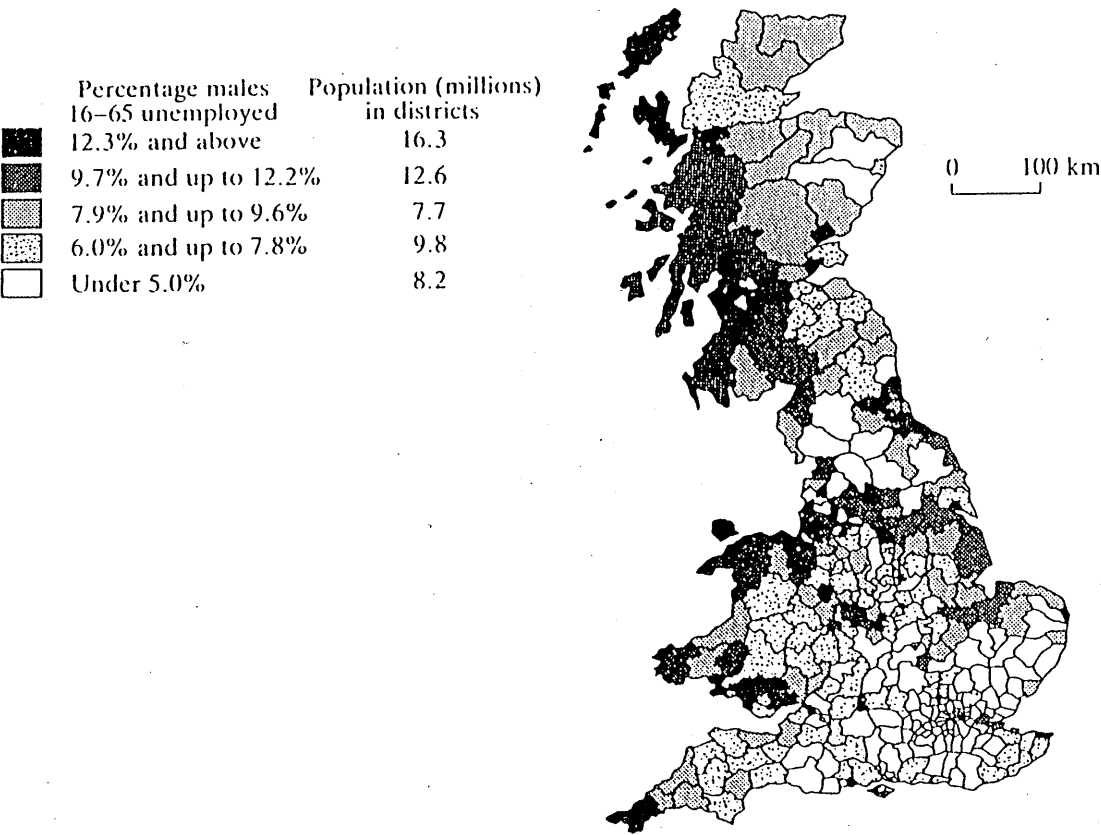
Unemployment is by no means the sole measure of the North/South divide as Massey has shown using a number of social indices related to the standard of living, where the South and East of England performs consistently better than the remainder of Britain (1985). Quite clearly, levels of unemployment are a component making for differences in social geography, but such differences

equally reflect, as Massey points out, the changed spatial division of labour that has occurred as a concomitant of the spatial separation of production functions where strategic conception and control activities have concentrated along the M4 corridor and its commutable environs, whilst execution functions related to direct production lie beleaguered behind the line of divide (1985:80). There are, as she is at pains to emphasize, clear implications for the geography of social classes and their political behaviour. What often goes unexplored by many commentators, however, are the corollaries these spatial changes have for other social relations.

Superimposed upon spatial differentiation along class and sectoral lines has been another dimension; that of gender. As we have seen, the primary beneficiaries of deindustrialisation have been women - at least in terms of their participation rates in paid employment. Just as deindustrialisation has had differential spatial effects, gender patterns also have been disrupted. The negative consequences of deindustrialisation have, as we have seen, largely accrued to men as waged workers. As the largest shareholders in the economic base of manufacturing employment they have correspondingly suffered the greatest casualties in its destruction. As Table 2.7 showed, the recession was primarily, though not exclusively, a men's recession. Even in the suspect (according to Martin, 1986) recovery period, male employment loss still appears to have been sustained, though their position in the employed labour force as a whole may have marginally improved due to their greater representation among the self-employed which grew rapidly at this time. The spatial dimension of male unemployment (Figure 2.22 below) has, of course, moved in symmetry with the changing fortunes of manufacturing employment and its geographical base. As the map shows, a great swathe of male unemployment stretches the length of the M62, taking in all the major industrial conurbations of West and South Yorkshire and neighbouring Lancashire, continuing on into Wales with further, but less extensive, pockets lying at the eastern and western poles of the

Midlands, to the east of London and at the extreme tip of Cornwall. Virtually the whole west coast of Scotland can safely be proclaimed a disaster area .

Figure 2.22: The Spatial Dimension of Male Unemployment in 1983



[Massey:1985]

No equivalent mapping exercise has, as far as I can determine, been carried out for women's unemployment. Inconsistencies among women in registering as unemployed in any case means that any map would show a distorted image difficult to interpret. Nevertheless, something is known about the historical geography of women's labour force activity. Prior to the onset of deindustrialisation, a notable feature of the geography of women's participation in paid work has been the relationship between the kind and structuring of work in which men were engaged in different regions and the activity rates of married

women in particular. The lowest rates for women occurred in those regions where the nature of men's work was dirty and/or entailed shiftworking. The classic examples are the coalfield and other heavy industry areas where the jobs that men do necessitate large amounts of domestic labour provision in washing, cleaning and meal provision synchronised with shift patterns. Households with several male members working underground, for instance, not only intensified loads, but the period of demand for domestic labour is potentially spread round the clock, as one shift departs and another arrives. Meal preparation alone could therefore be spread from very early morning to late at night as shifts come and go. Women's relation to production in some regions has therefore been part and parcel of men's position within it. Other areas like the North West and West Midlands have traditionally had high female participation rates, either in the textiles industry as in Lancashire or within the potteries in the case of the West Midlands. Figure 2.23 shows the distribution of married women's economic activity rates in 1971 and thus provides the picture before deindustrialisation really got underway, whilst from Figure 2.24, which shows the changes that took place in activity rates between 1971 and 1981, it is possible to understand how increasing participation rates have been distributed across what started out as a very uneven spatial pattern. The proportion of married women in the labour force surged from 48.8 to 56.9 per cent during that period. In 1971 the static picture is of very high rates restricted to married women in the North West, the Midlands and London. During the period 1971-81, however, despite increases being experienced nationwide in that no Local Labour Market Area (LLMA) experienced a drop in economic activity rates for married women, the level of increase has varied widely; between 1.6% in West Bromwich in the Midlands to a 17.2% increase in Bridgend (Champion et.al:1987). These two extremes are indicative of the broad spatial changes that resulted, for back in 1971 these were respectively areas of extremely high and extremely low levels of activity. Rates of increase then have gone against a tradition of very wide differentials across the country. This is glaringly obvious

when you compare the two figures, where changes over the decade are virtually the photographic negative of the static picture for 1971.

Figure 2-23 **Geographic distribution of married women's economic activity rates, 1971**

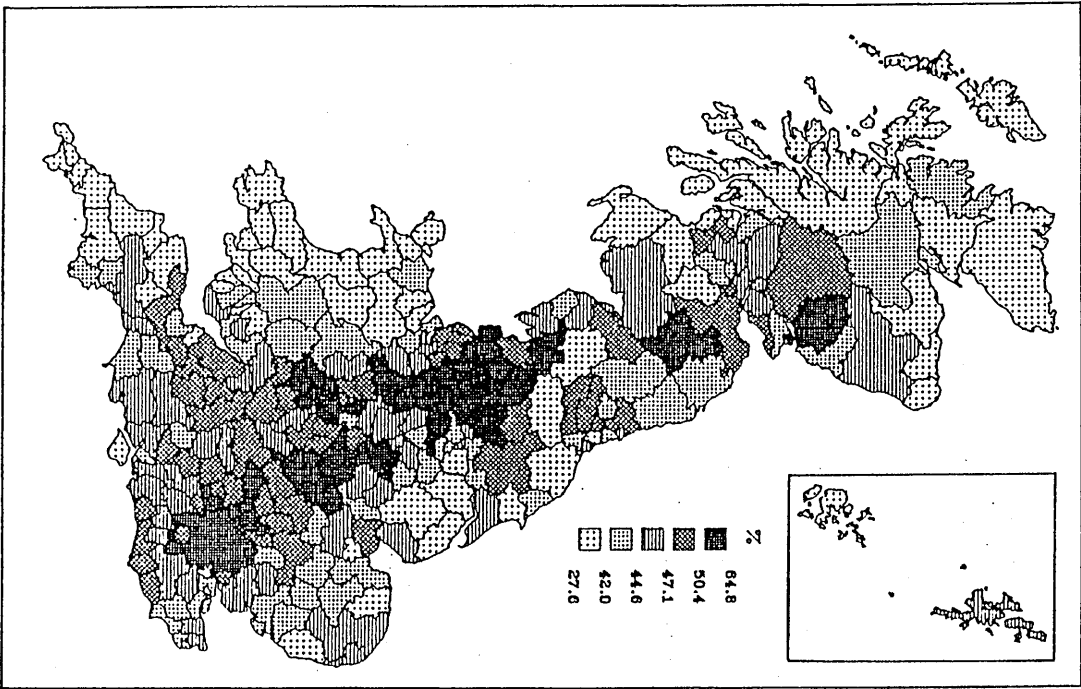
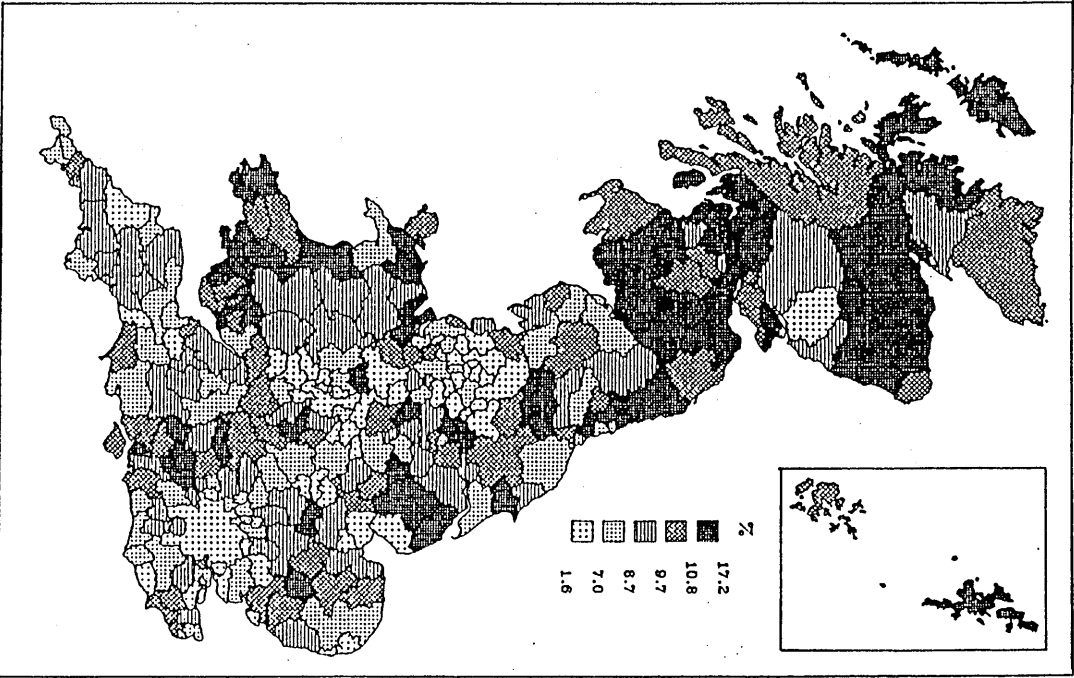


Figure 2-24 **Change in married women's economic activity rates 1971 to 1981**



The combined effect of this spatial pattern of change superimposed upon the previous differentials has been to render married women's participation in the labour force more spatially homogeneous, so that we can easily imagine a third map depicting a less kaleidoscopic pattern and more one of monochromic shading across Britain. Underlying these changes in each area, however, has been a different set of processes. For women in the North West, for example, the loss of their jobs in the textile industry that gave them a traditional position of pre-eminence, coupled with a less average growth in the replacement service industry activities (largely, though not exclusively, responsible for increases in married women's employment elsewhere) has levelled down the region to a point where they enjoy very similar rates of participation to women in the rest of Britain. By contrast, areas like South Wales, where married women were traditionally largely absent from the labour force by virtue of the nature of the men's work in the region, their participation rates have rocketed with the arrival of new manufacturing industries exploiting the 'green' labour they represent.

Whilst the geographical disparities between married women's participation in the labour force may have narrowed, the historical pattern of social relations between men and women has been radically reshaped in the process. As Champion et. al (1987) comment, all the spectacular increases occurred in LLMA's that previously had below average participation rates in 1971. Some the highest increases appear in traditionally male-dominated heavy industrial towns, as Table 2.14 below shows:

Table 2.14

Change in economic activity rates for married women of working age 1971-81
Extreme LLMA's

Highest LLMA's	% point change 1971-81	EAR 1971	Lowest LLMA's	% point change 1971-81	EAR 1971
Bridgend	+17.2	(38.0)	West Bromwich	+1.6	(55.40)
Stornaway	+15.5	(27.6)	Nelson & Colne	+1.6	(62.9)
Stirling	+13.6	(45.0)	Bradford	+2.6	(57.1)
Didcot	+13.6	(44.9)	Rossendale	+2.7	(64.3)
Edinburgh	+13.3	(49.7)	Burnley	+2.9	(64.8)
Swansea	+13.3	(42.0)	Rochdale	+3.1	(61.1)
Shotton	+13.1	(36.7)	Crawley	+3.3	(59.6)
Elgin	+13.1	(34.8)	Accrington	+3.3	(63.6)
Chester	+13.0	(43.7)	Lowestoft	+3.3	(46.7)
Greenock	+12.7	(41.6)	Yarmouth	+3.5	(45.8)

[Source: Champion et. al:1987:52]

Looking at the above more closely, it is immediately apparent that among the poorest performers, the smallest percentage gains have been the inverse of where they started out in the activity rate league; all these had above average rates in 1971, whereas the reverse is true for those towns with the highest rates of increase. In the areas of traditionally high female participation this has broadly been due to the way service growth has articulated with the established spatial pattern. Whilst growth in absolute terms may have been similar to that experienced elsewhere, it has been insufficient to outweigh the depressing effects manufacturing losses have had on women's participation rates in these areas. In other words, women in these areas may have undergone the same sort of transfer into service employment as their sisters elsewhere, but this has been insufficient to maintain their high regional participation status among married women workers. Among the towns experiencing the highest increase, the underlying reasons for the leap in participation rates have been more divergent. In towns where there was a tradition of male-dominated industries, the rise in married women's activity has often been in new manufacturing industries, like electronics (particularly true of

Wales and Scotland); the only growth sector within an overall situation of manufacturing decline. In the areas where the male workforce has been less of a depressing factor in women's economic activity, the rise in rates has on the whole been due to the greater than average increase in service employment in these areas. In some regions, particularly the unskilled electronics assembly type work in Wales and public sector service growth in Western Scotland, these changes have taken place within the context of heavy male job losses, so that the whole fabric of gender relations has been disrupted. In the North West too, women have managed to at least hold on to similar rates of labour force participation **relative to the men in the region** because, despite both men and women having experienced severe losses in manufacturing employment, married women here have had the option of alternative sources of employment in service activities.

In terms of **presence** in the region's labour force then, the relations between men and women the the North West have not appreciably altered; women here have retained their strong claim to paid work. However, the nature of the jobs women now do has changed the conditions under which the female gender is socially constructed in Lancashire. Many of these newer forms of work stand in sharp contrast with their former jobs in textiles. These women were formerly among the highest paid female workers in the country, a factor which has undoubtedly tempered the authority of the 'breadwinner' under the domestic division of labour normally enjoyed by men in other parts of the country. The new jobs, however, are often part-time, and lower-paid, and the nature of these jobs and the skills they utilise are (in common with all the service industries where women are most heavily concentrated) strongly associated with the nature and skills women perform under the domestic division of labour. The traditional manufacturing jobs women performed in textiles have always been regarded as in sharp contradiction to domestic labour. This, of course, was at the root of the most vitriolic public condemnation of women textile factory workers in the nineteenth century, as we

shall see in the chapter dealing with the historical cotton region. The uniquely self-assured, highly-paid female textile workers in the former cotton region gave a different quality to gender relations under the domestic division of labour, where, as a consequence, patriarchal authority did not have the same material guarantees that men enjoyed in other regions where they were unequivocally 'breadwinners'. The current changes in the cotton region may see a 'normalisation' of patriarchal relations under the domestic division of labour. In regions with formerly low participation by married women the rapid rise in their activity in combination with an astronomical rise in male unemployment has conversely deregulated the dominant patriarchal relations. The changes taking place in either case break the traditional gender moulds within and across regions.

Chapter 3

Theories Of Women's Position In The Labour Market

3. INTRODUCTION:

Explaining the persistence of an unequally structured labour market has, until recently, been the concern of economists and sociologists. Each of these two mainstream approaches of the 1950's and 60's incorporated a range of theoretical perspectives, which are examined below. Together they erected the edifice against which feminist theorists in the 1970's mounted a sustained critique, unified in their challenge that the causes rather than effects of sexual inequality had not been addressed. But, as the feminist critique gathered coherence, the theoretical divisions between radical feminists, socialist and marxist feminists over the location of the determinants of sexual inequality in either capitalism or patriarchy became more apparent. Attempts to mend the 'unhappy marriage'¹ between capitalism and patriarchy saw the emergence of dualistic theories which conceived of the two systems as interdependent - each providing the necessary conditions for the existence of the other. Despite a long, intense and complex discourse between these various currents of thinking there is still no satisfactory theoretical conceptualisation of the sex-gender system and its articulation with the mode of production.

¹As the rift between Marxist and Socialist Feminists versus the radical feminists came to be known.

3.1: SOCIOLOGICAL APPROACHES

3.1.1: Women's Two Roles

Women's Two Roles by Myrdal and Klein published in 1956 set the framework for post-war sociological studies of women's employment and was a response to a recognised tension between the increasing participation of married women in paid work and the preservation of their role in maintaining the family. The Beveridge Report of 1942 was quite clear on the role of women in rebuilding Britain. The ideology that a woman's primary focus was the home and family and that she was economically dependent on her breadwinner husband was enshrined in the Beveridge Report, which in turn formed the basis for welfare provision in post-war Britain:

"During marriage most women will not be gainfully employed ... the great majority of women must be regarded as occupied on work which is vital though unpaid" [and] In the next thirty years housewives as Mothers have vital work to do in ensuring the adequate continuance of the British race and British Ideals in the world"(Beveridge:1942).

That women themselves espoused the ideology was uncritically accepted by many of the early sociological studies. Their view has more recently been challenged by work such as that of Chetwynd and Hartnett (1978) on the sex-role system and others who have uncovered the mechanics of sex-role socialisation in the family (Goldberg & Lewis, 1969; Lewis, 1972) and via the education system (Wolpe, 1978; Arnot, 1981; Delamont, 1980 and Deem, 1980) whereby sexually-ascribed dichotomous personality stereotypes are constructed and subsequently employed in allocating males and females within the sexual division of labour; a process in which male attributes are consistently invested with greater value.

Myrdal and Klein's analysis in the immediate post-war period was, however, imbued with the spirit of prosperity and notions of a more egalitarian society fostered by the Labour and 'never had it so good' Macmillan administrations. Greater economic prosperity, smaller families, a rapidly growing welfare state, new labour-saving domestic appliances and increasing employment opportunities in the newly-emerging service sector together signalled the theoretical potential at least for women to combine their home role with paid work. Myrdal & Klein nevertheless kept faith with the prevailing Beveridge-inspired view that a woman's primary role was as wife and mother; the emancipatory potential of paid work was more or less limited to periods in the female life cycle when she was not fulfilling her primary function. As Myrdal and Klein saw it, it was in the interest of individual women not engaged in child-rearing, as well as the nation, for them to enter paid work. Choosing to work was a duty rewarded by the prospect of greater equality with men:

"Our modern economy cannot afford, nor can our democratic ideology tolerate, the existence of a large section of the population living by the efforts of others." (1968, 2nd edition:26)

It may need stressing that the large section of the population living by the efforts of others they refer to are women, and not men. Post-war circumstances had opened up an unprecedented choice for women between home and work constrained only by the will and opportunity to enter the labour market (Seear & Smith, 1962:135). The conditions for resolving the age-old 'feminine dilemma' was finally capable of resolution in Myrdal and Klein's eyes since women themselves were now liberated from:

"the need ... to make a fatal decision between irreconcilable alternatives. The Gordian Knot of a seemingly insoluble

feminine dilemma has been cut ... No longer need women forego the pleasures of one sphere in order to enjoy the satisfactions of the other. The best of both worlds has come within their grasp, if only they reach out for it." (1956:xvi)

A stumbling block, they inferred, was the out-dated attitudes of women themselves, particularly working class women, whom they chastized for their slowness in following the 'about face' of their urban middle class sisters on whom:

"It eventually fell ... to symbolize the more systematic return to economic productivity, by entering paid employment." (1968:2)

Having spent the best part of a century aspiring to the middle class ideal of homemaker whereby:

"... many working class women left the labour market, since it was felt to be an important element in a higher standard of living that wives and mothers should be able to stay at home, like the women in more privileged social groups." (1968:2)

working class women were implored to again emulate the initiative of their social betters and march in the opposite direction. Circumstances had changed, and it was simply stubborn or short-sighted, these authors infer, not to adapt to them:

"The most painful part of the readjustment is caused by the fact that habits of thought that belong to past phases of these complex developments, and frequently to particular social groups, become established as absolute in situations where they no longer apply." (ibid).

Myrdal & Klein consider the only barrier to re-entering the labour force after child-rearing is to adopt the 'right' attitude. Consequently their work ignores the real conditions and position of women inside the labour market, particularly the working class women at whom their rhetoric was directed. They assumed that choice, career development and equal opportunities were available to all women which, as Wajcman has pointed out, was applicable to only a narrow section of mainly middle class professional women

(1981:11). Besides ignoring class differences between women, others have drawn attention to their inability to take account of the wider social structure that gives rise to the sexual division of labour, the occupational segregation of men and women or wage differentials between the sexes (Beechey & Whitelegg, 1986:107). Their major assumptions that women had a choice to make between home and work, and that working women would in any case combine both paid work and domestic labour roles, steers them away from critical examination of the sexual division of labour and resources within the family. Ignoring the real constraints upon women, as Wajcman stresses, makes it impossible to understand the real choices that underlie the manifest 'choice' to work or stay at home. By concentrating on vaguely defined attitudes such as commitment and choice, she argues, the "two roles literature loses sight of the social context which imposes limits on women's behaviour" so that decisions on whether to work part or full-time, for instance, appear "as a matter of will rather than being largely determined by structured social arrangements" (1981:11,12).

3.2: ECONOMIC APPROACHES

3.2.1: Human Capital Theory

Women's central role in and commitment to the family and choice in entering paid work also features prominently in some neo-classical economists' formulations. Like the sociological studies, human capital theorists focus upon the supply characteristics of women. There is both a qualitative and quantitative strand to their analysis.

For Mincer (1962) variations in the level of women's participation in the labour force are explicable in terms of women's commitment to the domestic household. This commitment acts as an additional option in the work strategy, which is exclusive to women: they can choose between leisure,

unpaid domestic work or paid work outside the home. Women exercise the choice to enter paid work only at times when labour market conditions and opportunities are optimal: thus, women's participation levels swell during economic booms when working conditions are generally better, and subside during economic downturns as wages and conditions deteriorate and employment opportunities contract. Human capital theorists portray the economy almost as a natural force; business cycles behave after the fashion of the lunar cycle's effect on tide levels: waves of women workers ebb and flow in and out of the labour market under its influence. As Walby (1986) has pointed out, Mincer's analysis regards periods when women are out of the labour force as voluntary and not as unemployment:

"... it defines unemployment out of existence for married women while making it a crucial part of any account of male participation in employment." (1986:72)

Women's role in the family as housewives and mothers also has a qualitative effect; it lowers their commitment to paid work in general and in particular affects the general quality of women's labour. Inequalities within the labour market between men and women in wage rates and participation levels are explained by human capital theory as no more than a reflection of the differences between human capitals confronting a perfectly competitive market. This qualitative difference in the case of women results from the rational and optimal decision they make not to invest in human capital at the outset. Anticipating their future role women, they claim, are less inclined to make the investment through education, training and work experience and, as consequently less productive workers, receive less reward in the form of wages. Here the theory is only partially empirically correct. Young women in fact start out in the labour market with higher educational qualifications than young men (EOC:1986) and are more likely to enter further or higher

education on a full-time basis (DES:1986). Boys, however, are much more likely either to leave school holding, or go on to attain, training aimed at a specific vocation. Current schemes run by the Manpower Services Commission have tended to sustain rather than alter this disparity (EOC:1986). Once at work, however, this initial gap in occupationally oriented education between the sexes is prised still further apart as a consequence of differential access to on-the-job training (OJT) as the National Training Survey conducted by Elias and Mann (1982) showed.

What these studies indicate is that first, human capital theory's assumption that women initially possess a low level of human capital is not altogether correct. The difference between the sexes is at once both qualitative and quantitative; young women have more educational credentials, but are less likely to hold qualifications than can be easily reconciled with jobs in the labour market. What human capital theory does here is confuse the qualitative and the quantitative. Qualitative advantage for boys is measured as a quantitative advantage against which girls can then be shown as lacking, and quantitative advantage for girls can be effectively ignored since it is qualitatively inferior. This leads us to a further problem. Early formulations of the theory which described girls as having lower initial levels of human capital may well have been more faithful to the reality they were attempting to explain at that time. There were indeed fewer girls going on to higher education and the provision of vocational education may have favoured boys, but later reworkings of the theory ignore the changes in the education system and other social changes which to a large degree invalidate their basic premiss that young women enter the labour market as inferior workers. By employing shifting definitions of human capital these theorists are able continually to move the goalposts to prevent any later evidence threatening the basic premiss. But this device reveals something much more

interesting, for it in fact represents what indeed happens in the transition from school to work. The school system does operate on the pursuit of education measured in quantitative terms, (more and higher levels of qualifications) whereas employment is tied to occupations and skills; the qualitative performance of the worker. The conceptual framework of human capital theorists then mirrors social practice, and for this reason these theorists fail to question social practices which construct the qualitative and quantitative measures of girls' educational achievements as inferior to boys' in the first place. By the same token, practices within the labour market that construct young working women as secondary to men and therefore establish a gendered *relation to the labour market* which serves to locate men within production and women primarily outside it in the family, are obscured from any critical evaluation by human capital theorists. Secondly, later studies challenge the view of human capital theorists that the effect of an initial low stock of human capital is compounded in later years during periods of child-rearing when its value depreciates through lack of use or obsolescence, so that women re-enter paid work in a less competitive position.

As the education and training studies demonstrate, the inequalities between women and men in the labour market are not entirely, or even in the main, the outcome of individual choice, exercised *prior* to labour market entry which later experience in it reinforces, as the human capital school have it. Rather, inequalities in relation *to* the labour market at the outset are reinforced by the gender bias in OJT and it is therefore during early working life that women's human capital begins to be seriously eroded rather than the rust setting in during the family formation stage in their life cycle.

In its reliance upon notions of choice and commitment human capital theory suffers many of the shortcomings of the early sociological studies just discussed. It ignores the social relations within the family and work which set the context within which decisions and choices are made. In this case it stems from neo-classical economics' voluntaristic notion of free and independent economic actors making rational and optimal choices to maximise their own self-interest, the critique of which we need not rehearse here.¹ Gordon (1972) and Craig, et.al. (1982) convincingly refute human capital theory's claim that wages reflect in any direct way a worker's productivity (i.e. skills, experience - in short, human capital), since many jobs in the secondary sector require as much skill as primary sector jobs but pay is nevertheless lower and, similarly, Bluestone (1977) has illustrated just how human capital theory achieves insularity from disturbing other factors by drawing attention to the way productivity has been equated with human capital so that 'these theorists were able, with a single semantic stroke, to explain all variance in employment status and wage rates in terms of one parameter' (1977:335-40). More importantly, human capital theory cannot account for the empirical fact that when 'other things are equal', when women and men in the labour market *do* possess equal human capital, there is still sex inequality at work, as recent studies of sex discrimination in the US labour market (Buchele:1981) and in the UK (Chiplin & Sloane:1982) attest. Further, many underemployed, low-paid or unemployed workers do in fact possess considerable amounts of human capital, (Bluestone:1977:337) and, as the statistical analysis in the previous chapter shows, it is precisely in these categories of labour market status that women are often found. More serious still for the theory, it cannot account for wage differentials between industries where the job content and

¹Joan Robinson (1934) was the first to take issue with the assertion of neo-classical theory of a labour market characterised by perfect competition.

occupant attributes are identical, as the well-documented case of male truck drivers in the United States has revealed (Dunlop:1957; Clegg:1961; Norris:1975).

The crucial point of inadequacy in human capital theory, however, like that of the sociological accounts, revolves around the concepts of choice and commitment. In assuming women will choose to give primacy to unpaid domestic labour over paid work the theory reinforces ideologies that view women's paid labour as peripheral to their 'real' domestic role and thus as less committed workers seeking paid work for 'pin' money. The empirical and popular evidence belies this marginal view of women's economic contribution. The Women and Employment Survey (Martin & Roberts:1984:137) has shown that women's labour market participation is far from limited and short-term. The rise in single parent families (the majority of them headed by women), the increasing number of other households also headed by women, and the growing perceived need of the conventional nuclear family for two wage-earning parents which allows them to attain the ever-rising standards of consumption which mark the achievement of the social and cultural norm, are all testimony that necessity (however individuals perceive it) is paramount in decisions about working. For instance, out of almost one million single parent families in Britain 845,000, or 90 per cent, are headed by women and a mere 5 per cent of households in Britain conform to the popular image of breadwinning husband, non-working wife and two children of school age. Sixty-four per cent of married women under retirement age are working and, taking all women together, the average woman's life between completing education and retirement contains just seven years when she is without a paid job (EOC Factsheet:1987). Similarly, around 20 per cent of all 'non-pensioner' households, the majority with children and adult dependents, were wholly

or substantially dependent upon a woman's earnings or social security benefit (Land,1976:116) and, finally, the Royal Commission on the Distribution of Income and Wealth of 1978 reported that when wives were not engaged in paid work the chances of a family in Britain being in poverty were almost one in three, whereas working wives lowered the family's chances to nearer one in fourteen. Clearly, an increasing number of women work simply to maintain the family income above poverty levels or because theirs is the sole source of household income.

In different ways Wajcman (1981) and Walby (1986) underscore the absurdity and diversionary effect of the central notions of choice and commitment alleged for women's lives in human capital theory in deflecting attention from the contextual structured social arrangements within which 'choices' are made. Wajcman rightly contends that the failure to problematise choices and commitment serves to veil the concrete considerations that affect them: 'A woman may, for example, be 'committed' to housework either in the sense that she is house-proud, or in the sense that if she fails to do it her husband will beat her.'. To make such a vaguely defined attitude into a key variable in discussions of the problems faced by working class women in the factory and the home is, she asserts, 'to obscure more important and more practical questions' (1981:12). The practical constraints of mismatches in nursery places or times of provision and in school hours with work availability and working hours are, she argues, real inputs into so-called 'choices' and since women still bear primary responsibility for children, it is they who must make adjustments in their working lives. The fact that it is not legitimate nor customary for men to make adjustments by taking time off work to care for children who are ill, for example, does not mean it follows that men are more committed to work (ibid). Feminist work in psycho-analysis has highlighted the ideological

underpinnings legitimating such gendered social practice and oppression by locating the powerlessness felt and experienced by women as women as both externally and internally imposed. As Chodorow's study of conditioning for the role of mothering reveals, the necessary aspect of the personal and individual experience of mothering for women gets bound up with the non-necessary aspects of housework and child care so that:

"Women's roles are basically familial, and concerned with personal, affective ties. Ideology about women and the treatment of them in this society, particularly in the labour force, tend to derive from this familial location and the assumptions that it is or should be both exclusive and primary for women, and that this exclusivity and primacy come from biological sex differences. By contrast, men's roles as they are defined in our society are basically not familial. Though men are interested in being husbands and fathers, and most men do occupy these roles during their lifetime, ideology about men and definitions of what is masculine come predominantly from men's non-familial roles. Women are located first in the sex-gender system, men first in the organisation of production" (1978:178)

Similarly, Sylvia Walby draws attention to Mincer's assumption 'that the household rationally decides on its labour market activities so as to maximise its income and leisure as a unit'. This, she argues, fails to expose inequalities of power within the family which 'has important effects on the decision as to the distribution of paid work, unpaid work and leisure *between* the household members'(1986:73). Citing Gershuny's (1983) evidence confirming that women do more work, paid and unpaid, and have fewer leisure hours than men, and the work of Scharf (1980) which demonstrates that husbands can and do sometimes exert considerable influence over whether their wives go out to work¹, she argues that household decisions may have less to do with economic criteria and more with maintaining the authority of the male inside the family. (1986:73).

¹For a more recent indication see the Women & Employment Survey, Martin and Roberts 1984, Table 11.7.

The 'two roles' literature and human capital theory have nevertheless served to throw the theoretical spotlight on women workers in the otherwise male-oriented disciplines of industrial sociology and economics, though the scope and focus have been insufficient to produce a rigorous analysis of the position of women in the labour market. They have focussed primarily on married women and specifically their relation *to* the labour market, and thus shed little light on the position of women workers generally *within* the labour force. Their concentration on the quantitative and qualitative aspects of the supply of female labour has been counter-balanced by studies originating in the United States which sought to explain the position of blacks in the occupational structure and out of which emerged theories of segmented, 'balkanised' or internal labour markets.¹

3.2.2: Dual Labour Market Theories

Many formulations of these theories stem from the early work of Doeringer & Piore (1971) who suggested that whilst competitive forces operate in the external labour market to sift applicants to various jobs, once inside an establishment bureaucratic forms of distinguishing between workers are brought into play. Thus they envisage the labour market composed of dual segments: a primary labour market with an accompanying internal labour market structure acting to shelter primary workers from external competitive market forces, and a secondary labour market composed of workers with little or no such shielding. A crucial determining characteristic between the two types of labour market, and therefore of primary and secondary workers themselves, is the stability of employment engendered by the characteristics of each market. Primary workers are key workers in terms of their skills and the amount of training investment a firm has expended upon them. The internal labour market, with its promotion ladders and

¹For a clarification of terminology and concepts in the field of labour market segmentation see Ryan P (1981).

wages structure marks an attempt by employers to protect their investment rather than it being realised by others in an open market for primary labour. The relative employment stability accruing to primary workers as a result of this cushioning internal labour market serves to distinguish them from workers in the secondary market who, by contrast, exhibit a less stable work pattern by virtue of their more direct exposure to the external market forces influencing the climate of the labour market,¹ since, possessing inferior skills, they are more easily expendable by firms experiencing difficulties.

Whilst the duality principle is a fixed concept in dual labour market theory, the allocation of jobs to the primary or secondary sector is not.² The uncoded set of practices which operate in the internal labour market to the mutual benefit of primary workers and capitalist are, these theorists assert, the outcome of custom and bargaining between trade unions and management. Pay and promotion rules and which jobs qualify as primary jobs are honed out of the prejudices of each. In the process secondary workers become defined by default as constitutive of, not necessarily opposing sets of characteristics, but at least in negative relation to primary workers. Thus there is no absolute relation between occupations and sectors; the occupational content of each sector is theoretically open to change in line with the outcome of the capital-labour bargain, despite the rigidity of the labour market form. Doeringer and Piore outline the broad features each sector possesses; first primary jobs:

"... high wages, good working conditions, employment stability, chances of advancement, equity and due process in the administration of work rules. Jobs in the secondary market, by contrast, tend to have low wages and fringe benefits, poor working conditions, high labour turnover, little chance of

¹Sengenberger (1981) treats variations in labour market segmentations with fluctuations in the business cycle much more fully.

²See Rosenberg (1981) who discusses the economic climatic conditions which may lead to reclassifications of occupations between sectors.

advancement, and often arbitrary and capricious supervision."
(1971:165)

The Dual Labour Market theorists also purport to supply an explanation for the lack of mobility of workers between the two sectors by asserting a fixed correspondence between sectors and their workers. These theorists argue workers become imbued with the characteristics of their assigned sector so that as Siltanen remarks: 'the instability of secondary jobs encourages the instability of secondary job workers which in turn, encourages their confinement to the secondary sector' (1981:31). This reasoning is held both to account for the durability of the structural form and to explain its discrete dualistic structure, and therefore the discreteness characterising the two groups of workers.

Dual labour market theory gives a plausible *raison d'être* of dual labour markets in the capitalist's motive to protect investments in core workers whilst retaining a workforce of sufficient flexibility to permit appropriate responses to fluctuations in the business cycle by laying off secondary workers during downturns. Nonetheless, it is less convincing in its account of the construction and maintenance of dual labour markets and their corresponding workers through, on the one hand, the capital-labour bargaining process, and the interaction of sector with worker characteristics on the other. Its greatest weakness, however, lies in its argument that the initial allocation of workers to the primary or secondary market during recruitment is based upon the assumed attributes of the worker. Thus workers assumed to have, or who potentially have, an unstable work pattern are placed in the secondary sector. Whilst recognising the need to elucidate the bases of hirers' assumptions, these theories nevertheless fail to get to the kernel of the problem. Clearly the assessment of an individual's potential employment stability at the stage of hiring cannot be gauged with

any precision. Dual labour market theory claims that employers overcome the problem by using highly visible attributes, such as race or sex as surrogate indicators, based on the employer's assumption that particular combinations of such personal attributes possess a greater or lesser propensity for employment stability. Certainly, pointing to such discriminatory employer practice based on norms and stereotypes is necessary in explaining why women and ethnic minority workers, for instance, tend to find themselves in secondary jobs, but it is plainly insufficient in that it takes as given the discriminatory criteria used in the allocation process and consequently fails to question how such assumptions gain credence in the first place.¹

Later studies in Britain which have applied the theory specifically to an analysis of women's position in the labour market have made no significant advance on this key problem. Barron and Norris (1976) allude to the role of women in the family, but it is demoted to a contributory variable. As in the work of Doeringer and Piore, the core explanation of a segmented labour market of a dual nature lies in employers' strategies, but, along with Gordon (1972) and Edwards, Reich and Gordon, (1973), Barron and Norris modify the reasons motivating employers in its creation. For them, the hierarchies and status achievement systems that a dual labour market fosters allows employers to operate a 'divide and rule' strategy. Obvious visible demarcators such as sex and race enhance workforce divisions, tending to centre divisions between workers around gender and race issues, rather than class relations related to the relations of production. They therefore possess a diversionary effect which, in some contributions, is seen as inhibiting the formation of a cohesive class consciousness (Edwards, 1979:xii,xiv and

¹Curran (1985) in a study of recruitment practice found employers, using expectations about married women's responsibility for family and child care were keen to elucidate whether their familial role might interfere with work performance. Married men, conversely, were viewed as reliable and motivated towards secure employment. What this work demonstrates

Stone, 1973:40-43)¹. Barron and Norris nevertheless concur with the account of employer recruitment behaviour given by Doeringer and Piore, outlined above, and adhere to the tautological argument they employ to justify the maintenance of the secondary labour market form and confinement of certain groups within it:

"When ascriptive characteristics, like sex, are used as selection criteria, it has the effect of confining the groups so delineated to the secondary sector over the whole of their working lives....the actual confinement of particular groups to the secondary sector will result in their having higher rates of labour turnover and job mobility. Thus a 'vicious circle' is created which reinforces the discrimination power of the trait which was made the basis of the selection criterion, and the labelling process becomes self-fulfilling." (1976:53)

They suggest that women comprise the major group of secondary workers in Britain due to their greater likelihood of possessing what they identify as the five main attributes used as recruitment criteria: dispensability; a highly visible difference (especially if this is regarded as inferior²); a low level of human capital stock and poor motivation to acquire more through training; low economism and, lastly, poor organisation and representation.³ Clearly this does little to advance the explanatory power of dual labour market theory since it also leaves unexamined the question of why such labels are able to stick to some groups and not others: pointing the finger at those

is that the domestic responsibilities of both married women and men are taken into account by employers, but that employers ascribe quite different meanings to their respective domestic roles: for women it is interpreted as making for relatively unstable employees whilst the precise opposite is derived from men's domestic role. The sexual division of labour in the household patently has very direct consequences for recruitment practices and hence for women's position in the labour market. A most interesting article which takes up the issue of the basis of assumptions made during recruitment and links the determination of wages and position in the labour market to the social costs of reproduction rather than the exchange bargain and therefore analyses the family and the State's role in reproduction is that of Picchio del Mercato (1981).

¹For Burawoy (1979) the development of class consciousness is inhibited by the dual structure of the labour market itself. The non-confrontational aspect of management-labour relations in the internal labour market means that they are similarly not confronted with the exploitative nature of capital accumulation.

²Hunt's study of UK management attitudes to employing women revealed that 'a majority of those responsible for the engagement of employees start off with the belief that a woman applicant is likely to be inferior to a man in respect of all the qualities considered important' and when asked 'whether they would choose a man or a woman if they had identical attributes, the only job for which a majority would choose a woman is catering or domestic work' (1975:12)

³For a discussion of other factors apart from women's domestic role which might affect commitment and aspirations see G Joseph (1983).

applying the labels is insufficient. And, whilst they can show that some women and other groups tend to score highly on the list of five attributes, to assume that attributes necessarily convert into the worker characteristics that are held to correspond to them is unfounded, as Hunt's two studies (1968 and 1975) demonstrate. In both studies she found no evidence to support beliefs that women were less reliable or stable employees. Rather the grade of employment and quality of the job had greater influence on turnover rates and absenteeism than the sex of the worker; findings corroborated by the evidence to a House of Lords Select Committee in 1972 which revealed that male turnover rates in clerical work were higher than those for women in the same grade. What this points to is that dual labour market theorists ignore the arbitrariness of the criteria themselves and in doing so are incapable of encompassing the wider social bases of sexual and racial inequalities that construct women and ethnic minority groups as inferior at the outset. In other words it is strictly a labour market theory but one which cannot adequately grasp the wider origins of the processes they identify within it.

Beechey & Whitelegg take issue with this narrow applicability by pointing to the fact that many women's jobs simply do not conform to the unskilled and semi-skilled secondary jobs done by women in the manufacturing industries upon which Barron and Norris's work is based. Moreover, it is arguable whether even most women's jobs in manufacturing can be characterised as secondary work, whilst the explanatory power of dual labour market theory simply collapses when considering sectors outside manufacturing work,

"Some women's work in manufacturing industries is skilled work ...Although this may be low paid in comparison with men's work, it is not marginal or insecure as secondary sector work is...secretarial work ...requires considerable training [and] may not be well paid in comparison with some men's jobs [and, though it] may not actually be defined as skilled, it is not marginal and insecure. Finally a good number of women are

employed in professional and technical jobs, especially in the public sector ... in some management jobs.(1986:111).

One other shortcoming pointed out by Beechey & Whitelegg is the lack of positive arguments in the theory as to why employers opt to hire women. Whilst they acknowledge one such positive attribute in the 'divide and rule' strategy this is, they argue, no explanation for the high concentration of women in certain occupations (1986:112). Finally, dual labour market theory is unable to extend its analysis to sub-divisions beyond the first order attributes of sex, race or age as the basis for further job segregation within these groups. In summary, dual labour market theory can make some, albeit limited, sense of the pattern of vertical segregation within the labour force but has dubious value when applied to sectors outside manufacturing, leaving a major difference between the sexes, that of horizontal occupational segregation in the labour market, untheorised, and therefore of course a major component in the structuring of the labour market as a whole.

Quite apart from these misgivings, others have mounted an internal critique of dual labour market theory, particularly with regard to the assumed lack of solidarism on the part of women. As Walby points out:

"This is always seen in terms of women not managing to organise, never in terms of men being organised against women in the labour market." (1986:81)

Jill Rubery (1980) too has taken issue with dual labour market theory's concentration on employer strategies arguing that it has suppressed any consideration of the role of trade unions. This is especially surprising given that some formulations of the theory, in their identification of management interests in the 'divide and rule' strategy, signpost fertile territory for conflict among workers. Rubery's work (and the comprehensive study of Roos & Reskin, 1984) demonstrates the way trade unions actively exclude women from some jobs through restrictive practices such as union-run

apprenticeship schemes, and promotion criteria or redundancy rules based on principles of seniority. Whilst this may reveal the mechanisms employed by men to maintain sexual segregation at work, it still, as Michele Barrett (1980) and Heidi Hartmann (1979a; 1979b) both make clear, does not explain why unions behave in this way. Barrett argues that unions do in fact have a choice of strategies they might use in struggles with capital, some of which need not have this divisive outcome, yet in the face of conflict they have nevertheless historically opted to base action upon strategies which depend upon exclusionary practices and the maintenance of differentials (1980:170).¹

On this question of the historical pattern of union strategies to exclude rather than organise women workers Hartmann's analysis is especially significant. Her suggestion that such practices reflect men's superior organising ability to maintain the power of patriarchy and that evidence for this can be found stretching back to the eighteenth and nineteenth centuries, counters the ahistorical perspective of labour market theories. Her argument runs that the development of capitalism threatened to usurp men's control over women which had traditionally resided in their control of family labour. The exclusionary and hierarchical practices of male trade unionists is just one of the strategies men have developed along with capitalist production in an attempt to retain control by exerting a controlling influence over the labour market. Power to exclude women from the labour market or rank them within it to subordinate positions, she argues, reinforces patriarchal power in two ways: by depriving access to jobs that offer a living wage and ensuring women's availability for unpaid domestic labour in the home in the service of men. Women's subordinate position in each of these spheres is mutually reinforcing. Under patriarchy, she concludes, a dependent

¹See also Lewenhak (1977) for a similar observation.

position for women in the home reinforces a dependent position in the labour market and vice versa.¹ Unlike Rubery, and the work of Roos and Reskin, she points to men's active involvement not only in the maintenance of job segregation but also in its *creation* and provides a rationale for its reproduction. Hartmann's contribution is important for she has expanded the horizons of labour market theory in pointing to the significance of the relationship between the family and the wider economy and her in-depth historical analysis signifies an advance upon others who are content to simply note this limitation of theories of the labour market.

This issue of active patriarchal practices in the workplace constitutes one of the main tributaries flowing into the mammoth feminist discourse over the bases of such practices. Before slipping downstream, however, we should, by way of summing up dual labour market theory, mention a final problem related to its lack of historical perspective and complete our discussion of economic approaches by considering the remaining major contribution to theories of women's position in the labour market: that of marxist economists.

3.2.3: Marxist Approaches to Female Paid Labour

Several writers have used Marx's analysis of the reserve army of labour as the basis for explanations of women's fluctuating participation in wage labour (Adamson et.al:1976; Beechey: 1977, 1978; Bland et al:1978; Braverman:1974; Milkman 1976). Marx regarded the process of capital accumulation as entailing the existence of a reserve army of labour which functioned to depress wages since a large industrial reserve army constrains

¹Secombe (1986) adopts a similar argument showing how patriarchy was historically stabilized through male combination to exclude women - action that established their material base once more inside the home in constructing the male breadwinner as the norm.

workers' wage demands and thus checks any threatened squeeze on surplus value. Marx was concerned to show that the reserve army would increase in two main ways. First, in line with the expansion of capital into activities formerly outside social production, and second as a consequence of increasing competition between capitalists resulting in attempts to increase the organic composition of capital through labour-saving technologies, thereby reducing the wage bill and displacing labour, especially skilled labour. As capital extends to bring production hitherto performed outside capitalist relations into socialised production, so in concert the reserve expands, since those formerly carrying out such activities form a ready-made pool of cheap labour for capital to absorb into newly-emerging industries. Its cheapness arises from the fact that it is labour constituted outside capitalist production. The existence of the reserve averts the need for newly-emerging industries with growing labour demand to offer higher wages in order to attract labour already employed elsewhere. This form of the reserve Marx terms the 'latent' reserve. The expulsion of skilled workers arising out of the increasing organic composition of capital enter the 'floating' reserve, whose principal function is to respond to the labour supply and demand effects of fluctuations in the business cycle. Finally there exists a third principal component of the reserve described as 'stagnant', composed of workers who typically work the longest hours for the lowest remuneration as and when work is available. This is not an exhaustive categorisation; Marx mentions other forms. This framework of distinctions between the forms, and especially how each arises and functions has become extremely distorted in the course of its progressive application to historical changes in the organisation of production.

It is within the processes entailed by the abstract law of accumulation that Braverman (1974) attempts to locate the dynamic of 'deskilling'. The need

for continual transformation of the forces of production through the introduction of automation and mechanisation of the production process for Braverman structures the organisation of the labour process. This not only changes the level of labour demand but also the nature of that demand. Since the development of capitalism is an uneven process, developed sectors which are located as it were at the eye of the accumulation storm have, Braverman argues, expelled and deskilled workers, enlarging the reserve available to newly-developing and expanding industries increasing their demand for labour. Fluctuations in the pattern and level of labour demand, and the composition of the reserve are thus linked to changes in the overall shifting composition of capital as a whole. As a consequence of deskilling processes occurring across all sectors and at all levels of the occupational hierarchy Braverman discerns a long term shift in the composition of the working class, which is essentially a shift in gender composition. The participation rates of men and women have tended to equalise in monopoly capitalism, he asserts, as men have suffered the effects of declines in manufacturing and women have entered the expanding services sector; motivated by other cultural and social changes¹ which place increased pressures on women to do paid work. The commoditisation of goods and services formerly provided within the domestic economy has meant that women, formerly engaged in these tasks, constituted a suitable supply of labour to perform them under socialised production in the absence of other reserves traditionally drawn upon to meet labour shortages. Conversely, men have increasingly joined the reserve by virtue of deskilling and resulting redundancy. Finally, he argues women are a source of cheap and unskilled labour easily absorbed and expelled from the labour force.

Problems with Braverman

¹See section 3.1.1, above.

Braverman's formulation has been extremely influential in later marxist-feminist accounts of fluctuations in the level and pattern of women's participation in the labour market. It is one that has an immediate intuitive appeal when set against the picture of restructuring outlined in the previous chapter: women do occupy secondary, low level and less secure jobs in the labour market, and certainly the uneven sectoral effects have indeed meant participation rates in the post war period evened out between the sexes; though this is not the same as saying there is greater equality between them, as Braverman seems to imply. This implied equality stems from his insertion of recent changes in capitalist society into a static formulation of marxian class analysis; the notion that deskilling is changing the composition of the working class so that more workers, (by virtue of the simple distinction between ownership and control), now constitute the working 'class in itself' appears unproblematical for class action. This is unsurprising since, contrary to the dynamic he attempts to insert into class formation through deskilling, his analysis is devoid of any treatment of deskilling itself as problematical, either as a consequence of worker resistance against capitalist attempts to impose deskilling, or indeed as a consequence of worker resistance succeeding in a reclassification of 'skill' altogether. This last, as we shall see is especially important. Not only would the transition to 'class for itself' be problematised, but attention to worker struggles with capital would potentially lead to a recognition of divisions between workers themselves and hence point to serious problems with asserting a unified class in itself. This brings us to a major problem with marxist analytical categories and the related problem in applying the dialectical method. A fundamental flaw in marxist analysis in dealing with concrete complexities like race and sex in my opinion lies in their conceptualisation of labour as a homogeneous entity. Abstracting undifferentiated labour up from the concrete can only result in a return

journey with theoretical baggage that can only be applied in an equally undifferentiated manner. This does not imply the invalidity of the method but rather that it is only as good as the analytical tools that employ it.

However, more central for this work, Braverman's account, following Marx, cannot explain why it is that women constitute the preferred form of the reserve since, as Beechey (1977:1978) has recognised, it cannot elucidate why women are cheap, unskilled and disposable and thus preferred to men. She has argued that it is married women in particular who have become the active component of the reserve since the war because of their dependence upon the male wage; their wages are therefore secondary and need not take account of the full costs of reproducing themselves. This, coupled with other legal, political and ideological factors, makes for easily dispensable workers: women's non-eligibility for state benefits and consequent lack of motive to sign on, for example, makes women's unemployment unproblematic, as does their low level of unionisation and the fact that familial ideology supports notions of their marginality to paid work (1977:57). Given the historical imagination the incorporation of these factors signify in Beechey's work, it is surprising that this is accompanied by an essentially ahistorical reasoning latent behind the manifest historic location in the post war period of married women's entry to the paid labour force. Certainly since the demise of subsistence production and the transformation in the meaning of the 'family wage' during the late 19th century from one which meant exactly that, where every member of the family contributed, to one which has come to mean the male 'breadwinner's wage, married women have generally (though with important specific class, historical and geographical exceptions) been dependent upon the male wage.¹ This dependency is for Beechey what makes married women in

¹See earlier footnote on Secombe (1986), Section 3.2.2.

particular the dominant 'latent' form of the reserve army. Now, since married women under industrial capitalism have always for the most part been in this state of dependency the historical location of their function for capital in the post war period must be incorrect: why do they suddenly take on this functionality? Clearly Beechey embarks from the opposite direction by correctly observing that the commoditisation of domestic labour fits the 'latent' reserve form by virtue of women being formerly engaged in these activities outside capitalist relations, but yet she consequently loses sight of this, changing tack to assert that married women's dependency on male wages makes them the cheap pool of labour complementary to rising demand from the expanding services sector that came much later. This unfortunately leads to a position which claims women function as a reserve army of labour because they are outside capitalist production whilst simultaneously arguing they constitute a reserve by virtue of being in paid work.

Whilst Beechey has attempted to breach the economistic focus on production by drawing in an analysis of the relationship between the family and production in industrial capitalism, the failure to link trade union activity against capital, paradoxically leads her away from considering how workplace struggles structure both production and reproduction relations (despite being quite clear on the historical role of male trade unions in resisting deskilling, Beechey 1977:55). Thus workplace struggles to exclude women from the workplace, or to structure their position within it, genders their relation to production and **within** production, and is thus a component in the dependency relations she locates entirely within their economic base within the family. A further paradox thus arises since the resulting analysis ends up no less economistic than the economism of both Engels analysis of the family and the economistic focus on production that

she expressly desires to overcome, for she ends up concentrating on the economic advantages to capital of women's work. This has led to charges of functionalism in that she argues these advantages to capital determine women's employment. This contradictory position leads us on to more specific critiques of theoretical inadequacies inherent in these and other formulations of the reserve army of labour.

One set of concerns has revolved around the lack of empirical evidence to support a theory of women as a reserve army. Against the claim that women have been drawn into production in periods of economic expansion and expelled during crises (Barron & Norris:1976; Jenness, et.al:1975; MacKay et.al:1971) there is a counter-body of evidence to demonstrate that women have not been expelled during crises as the theory would predict.

Problems with 'disposability'

Opponents divide into two broad camps: those that point to theoretical inconsistencies and those who draw attention to countervailing empirical evidence. Those favouring women's disposability and vulnerability to expulsion classically point to women's concentration in jobs and sectors which, for a variety of reasons, are in themselves volatile and vulnerable, notably Baudouin et al. 1978. However, Jean Gardiner (1976) discounts the 'disposability' thesis on the grounds that the 'logic of capital' must work to increase the salience and potency of women's cheapness for capital during crises rather than make them less attractive workers leading to substitution of female for male workers, yet Ruth Milkman (1976) suggests that the rigidity of sex-typed occupations places severe constraints upon substitution in either direction. She claims that fluctuations observed by reserve army of labour theorists during booms and slumps therefore reflect the fortunes of women's industries and occupations rather than signify

evidence for the mobilisation or otherwise of the reserve army, whilst Irene Bruegel (1979) has demonstrated that the pattern of fluctuations in the reserve is far more complex than these contributions suggest due to the differential impact of business cycle effects upon individual industries so that women's work can simultaneously be more protected *or* more vulnerable depending upon their distribution across industries and that the effect of slumps in particular in any given industry is different for women than for men (1979:15).

The boundaries of the reserve

Others have contested the boundaries of the 'reserve' based on their observation that the theory applies inconsistent and contradictory criteria to the empirical evidence. Thus, as Walby has noticed, the theory holds that the ejection of men from the workforce and the entry of women into paid employment both constitute an enlargement of the reserve army (1986:79). What Walby and other critics of reserve army theory identify in their critiques is a fundamental confusion over the various forms of the reserve and the chaotic conceptualisation that emanates from a lack of clarification of concepts; a situation that tends to worsen the further one recedes from Marx's original formulation, which itself was imprecisely formulated, (and which incidentally only Beechey specifically mentions). To this there is the added suspicion that critiques of Braverman, after the fashion of Chinese whispers, get distorted due to a reliance upon antecedent critiques of his work.

Some of this confusion stems from the application of the concept to quite different levels of analysis: on the one hand by reference to the abstract law of accumulation behind shifts in the overall composition of capital of which 'deskilling' for Braverman is the concrete manifestation and, on the other

hand to periodic and comparatively smaller adjustments in the workforce in response to fluctuations in the business cycle.

Bearing in mind the qualifications already noted, the theory is useful in explaining overall movements in the labour market and to a more limited extent how changes to the structure of that market arise, but gives no adequate analysis of why places in the structure are necessarily filled by particular groups or, put another way, it cannot explain why the labour market is structured as it is. In company with all the other explanations of women's position in the labour market we have examined, the reserve army of labour theory and the deskilling hypothesis ignore other forces which construct gendered workers in an unequal way, both inside and outside the labour market. Deskilling not only ignores workers' resistance to capital but also the way the structure of labour itself is constantly renegotiated and reproduced by workers themselves, so that both a reformulation of the capital-labour relationship and *the relation of workers to each other* emerges from struggles with capital and hence these combined elements shape the *social character* of labour itself. These outcomes within the social relations of production simultaneously feed into social relations at other levels of the social formation, which in turn and in combination comprise elements in the shaping of those other institutions and practices outside the production process. Production is a social activity and as such its determinate character cannot be delimited to the spaces or locus of the production process. Thus the social character of labour is constructed both inside and outside its articulation with capitalist production and is not solely constituted at the point of articulation. The renegotiation of the meaning and content of skill is constantly being renegotiated not only between capital and labour but also between capitalist and patriarchal forces. This is a serious omission for Braverman who, despite taking a historical perspective which alerts him to

processes that change what constitutes skill and therefore the task of the subsumption process by capital, he conceives of it as almost entirely the creation of capital. Historical materialism for Braverman begins with the skilled craftsman from whom all history flows. It is a history of the formal to real subordination of *his* labour by capital rather than labour per se. This not only ignores the capital-labour dialectic but also the dialectic between capital and patriarchy within which the social character of labour is shaped. Extension of the labour process debate to take account of the current reality would of course need to take account of the extent to which management of the labour process within enterprises need be effected in the terms envisaged by Braverman in order to secure continued accumulation. Certainly today we are seeing management accumulation strategies that externalise management functions, via sub-contracting of tasks to other firms or franchising. There have been internal changes too. The restructuring of employment relations has produced an internal labour supply pattern which is far more textured and variable than anything Braverman envisaged. These and other changes which mark attempts to intervene in the management of market forces themselves complicate the simple accumulation strategies Braverman assumed. Restructuring to extend the length of the working day or week is also often part and parcel of restructuring employment relations, with the introduction of weekend shifts and part-time workers and new patterns of day shift structure.

3.3: Problems with orthodox accounts of sexual segregation in the labour market

The problem many of the foregoing accounts of sexual segregation encounter lies in their determinism. Sociological approaches like those found in the 'two roles' and human capital literature are in fact tacitly

underpinned by a biological determinism that purports the only constraints upon women's paid work are matters of individual choice and commitment. Women, they contend, either lack the commitment or hold dubious attitudes to paid work because they are women whom, they argue, give primacy to their domestic role - a primacy as Chodorow has noted that is assumed to come from biological sex differences. (see Sections 3.1.1 and 3.2.1). The price of low commitment is relegation to low status jobs. The current social and technical division of labour between the sexes is therefore viewed as a simple result of biologically given 'natural' attributes.

As biology it is also seen as a universal feature of all human societies: whatever the economic form - capitalist, socialist or communist, society is necessarily patriarchal. Current job distribution and inequalities in that distribution between the sexes are pointed to as evidence of prior psychological traits emanating from biological differences, as we saw earlier. The structuring of the argument moves from a cataloguing of sex differences, say in job distribution, to the citing of parallel differences in non-human societies to assert the naturalness, and therefore neutrality, of sex differences. Embedded in this procedure is the idea that the social is reducible to the natural, and that what is natural is universal. Consistent with the ant, ape or bee 'societies' with whom parallels are drawn, biological determinist accounts thus admit no history, geography, sociology or politics. Thus the 'facts' are immutable and incontrovertible. What is now has always been and always will be. The degree of development (natural selection and adaptation) alters, but the essential **order** of things remains invariable and inviolable.

For instance, the observed 'fact' that women are heavily concentrated in secretarial and clerical work ignores the historical fact that until this century

clerks were almost exclusively men and that women were actively excluded on the biological grounds that the physical strain of office work was too much for them. But, with the rationalisation and mechanisation of office work early this century into standardised and routine jobs through the introduction of the typewriter and scientific management techniques, its function and status declined and clerical work became a female occupation (Morgall:1982). As low-paid dead-end jobs, of course, they were far from testing the stamina of women; on the contrary, women are biologically well-suited to office jobs because, as *Psychology Today* claimed as recently as 1978: "as women in general are superior in fine coordination and the ability to make rapid choices, they may, for example, be faster typists than men" (1978:51).¹ Equally, when computers were first introduced, programming was regarded as a clerical task and therefore women's work; that is until the creative and intellectually demanding nature of the work was realised, whereupon women were smartly edged out, only to re-enter the occupation again as programming became routinised with the separation of programming and systems analysis (Morgall: 1982).

Similarly, geographical differences that undermine the universality of phenomena and therefore their correspondence with immutable physical laws of nature,² are suppressed. So, the countervailing fact that general medical practice in the USSR is a female preserve is rendered incapable of detracting from the evidence that in western societies it is male-dominated. Domination of such a prestigious occupation is seen as corroborating the universal biological superiority of men who are practising to the optimum their 'natural' masculine attributes.

¹Attributes that could equally well justify the predominantly male city traders in international currencies.

²Also rendered dubious by feminist critiques of the 'natural' sciences that point to the falsity of separating subject and object (Rose, H:1982; Arditti, R:1982)

The fact that women are GPs in the USSR, and the fact that general practice is accorded a lower status there, firstly denies the biological bases of 'natural' attributes and secondly shows that attributes and differences are in themselves arbitrary and neutral. Whatever differences do or are claimed to exist is not the issue; no one would propose that there are no biological differences between the sexes. What is important is the social labelling of those differences as the case of GPs demonstrates for, if medical practice in the western world had a similarly low status it would be quite impossible to conflate medical practice with the superiority of masculine attributes.

This example, and that of the clerical workers, demonstrates that sex differences and their social interpretation into the gendered subjects of masculinity and femininity are bounded by time and space. Biological determinist sociobiology contradicts these most fundamental of scientific notions of time and space to transform locally and temporally specific observations into universalities. Categories like masculine and feminine should not to be treated as natural objects with a fixed and concrete reality but rather as historically and socially conditioned constructs. The confusion of gender with sex blinds us to the fact that society (gender) is not organism (sex). Gender constructions take place in specific time-space frames, but the point overt or covert biological determinist accounts subvert is that gender is socially produced. What could masculinity have meant to the ancient Greeks? Masculinity included homosexual practice; behaviour that is contemporarily regarded as the antithesis of masculinity. Historical imagination refutes the universality of such categories, and a sociological imagination would reveal that Clauses and laws prohibiting homosexual behaviour are no barrier to its continued social practice in the present-day. If masculinity is a biologically given 'natural' state, why do we need social

legislation to prescribe the forms it should take? Likewise, institutions such as the nuclear family, marriage or kinship are not the natural institutions that sociobiologists would have us believe. Kinship, for instance, is not a real, concrete entity but a legal fiction masking social relations among its members and does not therefore conform to any uniform pattern. As the anthropological evidence suggests, notions of kin are culturally and geographically bound, so that our own kin system would be quite unrecognisable in, say, some African cultures, and quite different from the cultural practices, say, of our own indigenous populations of Asian or Afro-Caribbean origin.

The economic explanations of women's position in the labour market fail on determinist and additional grounds. Dual labour market theories elucidate the criteria and mechanisms of allocation in the labour market that tend to place women in the majority among secondary workers, yet the allocation criteria are uncritically accepted, so that the wider social bases of sexual inequalities that individuals take to the market go unexamined. Since many of the worker attributes that form the basis of those criteria are essentially regarded as emanating from the personal will and attitudes of the individual's psychology (low human capital, poor motivation to train, low economism and unionisation) dual labour market theory ultimately, though implicitly, falls back on the determinism characterising human capital theory. This theoretical pedigree means, of course, that it is an equally ahistorical, aspatial and asocial account capable of absorbing none but the most narrow set of social relations between workers and capitalists at one historical moment. Even within this narrow frame of reference, in treating workers as a unitary and homogeneous class category in relation to the capitalist it fails to problematise class consciousness. More crucially, it is insensitive to intra-class differences as the basis for conflicting interests

between workers themselves. Interests that potentially cohere across existing workforce divisions: skilled versus unskilled, full-time versus part-time, permanent versus temporary and, of course, patriarchal actions by men to structure women's paid work. This is a peculiarly serious shortcoming in a theory which posits that these same worker characteristics define the sex-related boundaries of the primary and secondary sectors of the labour market. As we saw in discussing Rubery's critique, segmentation is not exclusively the result of employer 'divide and rule' strategies but, on the contrary, male-dominated trade unions actively shape labour market structures, whilst Hartmann has added the historical dimension, drawing attention to the linkages between patriarchal power at work and in the home.

These problems associated with the assumption of a unified class that translate unproblematically into 'class for itself' are also shared by some marxist economist formulations, notably Braverman. Their principle failure to provide a satisfactory account of persistent segregation stems from their proneness to view labour as an homogeneous and undifferentiated category. Labour is labour exclusively constituted in its relation to capital. So whilst Braverman can comfortably explain women's position in the labour force in terms of capitalist exploitation of the reserve, he is quite blind to the social and patriarchal forces that have constituted the reserve in the particular gender form it takes in the first place.¹

Dual labour market theories and classic marxist formulations of the reserve army are then to varying degrees ahistorical, asocial and, to a greater degree, aspatial. Even Beechey's attempt to go beyond the narrow

¹The most comprehensive critique on this aspect of Braverman's work is contained in Baxandall et. al (1976).

economism of orthodox accounts and link the constitution of some forms of the reserve army with wider social relations and incorporate a historical explanation for married women's dependence on male wages constructing them as a pool of cheap labour, ignores the well-known geographical differences in women's wage labour. Women in Lancashire, for example, have an unbroken tradition of wage labour, and particularly married women, stretching back to the transition from domestic to factory production, as do women in the woollen textiles region of Yorkshire's west riding, and the potteries area of North Staffordshire¹.

3.4: The Feminist Critique of Orthodox Accounts

A feature of all the explanations we have so far discussed is their focus on the effects rather than causes of sexual segregation in the labour market, and it was dissatisfaction with this partiality that evoked the interest of feminist scholars during the early 1970s.

The ensuing sex/class debate between marxist feminists and socialist feminists on the one hand, and the radical feminists on the other, is an enormous and complex one. An exhaustive account cannot be attempted here. Instead what I want to do is map the broad contours of the debate in the following sections.

¹In the principal weaving towns of Lancashire, for instance, three quarters of unmarried women worked and about a third continued to do so after marriage. In Burnley 38% of married women worked and in the more remote towns and villages in the Nelson & Colne valley this percentage may have been even higher. (Liddington & Norris:1978:58)

Critiques of orthodox¹ marxist accounts came from a diverse set of perspectives: socialist feminism (Eisenstein, 1979; and Hartmann 1979a and 1979b), psychoanalysis (Mitchell: 1971) and marxist-feminism (Zaretsky:1976), for example, united in their assertion of the orthodoxy's essentially reductionist and economistic analysis of sex issues. Social relations, they challenged, are not reducible to production relations. They differed, however, over the question of the primary arena and source of patriarchal dominance.

3.4.1: The Radical Feminists

The most basic social division for radical feminists is the separation of male and female into distinct classes of individuals that arises from the male striving for power and domination over women: all history can be explained in these terms. The focus is upon sex-typed psychological traits. The development of boys and girls focus on different goals: males seek power and domination over all things, and especially women, as an expression of their overpowering egoism, whilst women's oppression is inherent in their unique biological function as child-bearers and nurturers. Society reflects this male-dominated hierarchy, so that the key set of power relations is based on sex rather than class, in reproduction not production, and in the struggles between men and women rather than capital and labour. History's prime mover then is the Dialectic of Sex (Firestone:1974), and the political terrain, Sexual Politics (Millett:1977).

¹It is important to be clear what I mean by the term orthodox in relation to marxist analysis. I have no quarrel with the historical and materialist method of analysis, but take issue with the tendency to analyse broad social issues in very narrow economistic terms. The best scholars overcome this. More inherent to marxist analysis is its productionist bias - i.e. the premise that categories used to analyse nineteenth century capitalism are the most appropriate to current analyses. It is on this aspect of marxism that feminists have targeted their criticism. They term this strand of marxism as orthodox. For consistency I adopt their definition as referring to that body of marxist theory with a strong productionist bias - a bias that gives primacy to male working class workers and therefore the revolutionary project itself to men as the primary historical actors. Women are thus assigned a historical role that mirrors patriarchal gender relations in which women in the revolution are on the by-line, as Sargent puts it, as 'quasi-revolutionary cheerleaders' (1981:xiii) for the men actively making history.

The radical school has been roundly criticised by both socialist and marxist feminists for its obvious biological determinism (arguments we need not repeat here) and for ignoring the historical specificity and variability of male domination by committing the error of projecting back into history their analysis of contemporary phenomena.¹ (see Hartmann 1979b:13-14; Zaretsky 1976:78,83; Eisenstein 1979:16-22). Of course, their reliance upon biologically determined psychological foundations, in line with my earlier argument, also has a tendency to render the radical feminist formulation ahistoric and asocial.

3.4.2: Socialist Feminists

Socialist feminist approaches attempt to combine the strengths of the orthodox marxist and radical feminist perspectives by giving equal weight to capitalism and patriarchy, seeking to explain the relation between the two systems.²

Their basic work of reference is Engels' 'Origin of the Family, Private Property and the State'. Criticised as a product of his own Victorian sexual prejudice in projecting nineteenth century values back through history, Engels's work nevertheless left an important legacy in pointing up the impact of cultural and social forces structuring sexual relations. Despite his most basic Darwinian assumption of the evolutionary progression of the essential and differential nature of the sexes, the linking of sexual relations to changing social relations broke with the tenets of biological determinism. By pointing to the connection between structural changes in kinship and changes in the division of labour on the one hand, and women's position in

¹On the same error by biological determinists in relation to animal studies see Bleier:1984; Haraway:1984.

²Though not all adopting this perspective adhere to this dualistic approach - see for example Westwood S (1984) *All Day, Every Day*, Cambridge: Pluto Press.

society on the other, he forged the interrelationship between economic and social change and gender relations. If 'the world historical defeat of the female sex' lay in the rise of private property and its supporting cultural institutions, it followed that women's liberation lay in the overthrow of private property.

Not all contemporary socialist feminists agree that patriarchy is specifically capitalist in nature. Rubin (1975) argues that the sex/gender system is separate from the mode of production, but concurs that the production and reproduction of human beings is rooted in both the economy and the family. Eisenstein's (1979) formulation implicitly aligns production with economy and reproduction within the family in arguing that capitalism and patriarchy are independent but dialectically related and mutually reinforcing systems. Hartmann (1979a and 1979b) shares her acceptance of the importance of capitalist social relations, but conceives the relation between capitalism and patriarchy as having evolved into one of partnership. Hence she accepts the marxist analysis of structural inequalities, but finds it wanting in adequately explaining why the allocation to those structures are sexually biased. For her, patriarchy explains job segregation by sex, for instance, since male control of women's labour power in the shape of male trade unions and male workers, excludes women through a combination of practices such as debarring or frustrating their entry into unions or training programmes, maintaining sex segregation of jobs and supporting protective legislation.

Critics from each camp have taken specific and general issue with these socialist-feminist dual systems theories. The characteristic drawback (however the systems are conceived to relate to one another) for Young (1980:1981) is twofold. First, the specifically capitalist division of family and economy is viewed as universal feature of all modes of production

rather than historically specific to capitalism. The two resulting separate spheres reflect independent systems of social relations: one related to patriarchal family relations and one to capitalist production relations. It is here, she asserts, that radical and socialist feminists part company. It is essentially a divergence of the boundaries they put on the system of patriarchy. For the radical feminists it is an ideological and psychological structure located primarily in human reproduction relations that interact with material relations; for socialist feminists, patriarchy is itself a system of material relations that articulate with production relations (1980: 45-46). In the first, patriarchy is the universal and immutable backcloth against which the historical scene is played out. Having thus painted themselves into this theoretical corner, where there is little room for social action to change this monolithic patriarchy, radical feminist social change in more extreme accounts is predicated on the annihilation of biological difference by proposing the annihilation of the male sex altogether: the future is female. More moderate proponents, however, as Young has pointed out, rely upon traditional marxism to provide the motors of history:

"This ideological and psychological structure lying outside economic relations persists in the same form throughout.[...] The theory of patriarchy supplies the form of women's oppression, but traditional marxist theory supplies its content, specificity, differentiation, and motors of change." (1981:46-47).

It is, in essence, an ahistorical theory of patriarchy tacked on to orthodox marxist analysis. As such, Young says its second drawback lies in uncritically accepting that analysis and so it marks no radical departure, as the radical feminists claim. She is more sympathetic in her treatment of Hartmann's socialist-feminist formulation that successfully avoids the ahistorical radical position in maintaining that patriarchy 'has a material base in the structure of concrete relations' and therefore admitting the possibility of historical transformation of the patriarchal system itself. Nevertheless,

she takes issue with Hartmann's insistence that the system, although material, is still distinct from the relations of production. This in Young's view is slightly preposterous given Hartmann's own elaboration of the relation between the two systems. Quoting Hartmann, she says:

"If 'the material base upon which patriarchy rests lies most fundamentally in men's control over women's labour power' and if 'men maintain this control by excluding women from access to some essential productive resources' then it does not seem possible to separate patriarchy from a system of social relations of production, even for analytical purposes." (1981:47).

Accordingly, Young argues that capitalism and patriarchy are a **single and unified system of capitalist patriarchy** which has the oppression of women at its core:

"Capitalism does not merely use or adapt to gender hierarchy, as most dual systems theorists suggest. From the beginning it was founded on gender hierarchy which defined men as primary and women as secondary. The specific forms of the oppression of women which exist under capitalism are essential to its nature." (1981:61)

The primary analytical category for feminists should therefore be the **gender division of labour** rather than the orthodox primacy of class, which is incapable of analysing women's specific oppression:

"... a complete analysis of the material relations of a social formation requires specific analysis of the division of labour and ... this analysis neither derives from nor reduces to class analysis." (1981:52).

Elevating the category of division of labour to an equal status to that of class encompasses all socially necessary labouring activity and thus incorporates the totality of women's life activity into the analysis:

"A crucial aspect of the division of labour in every hitherto existing society is an elaborate gender division of labour that affects the entire society. Thus a complete analysis of the

economic relations of production in a social formation requires specific attention to the gender division of labour." (ibid).

Sandra Harding (1981) adopts a similar critique of orthodox marxism, arguing that its economic categories are sexist and inapplicable to the social relations of family life. In company with Iris Young, she calls for an extension of the material base, but confines this to the inclusion of the production of people - of biological children into gendered adults - for her this is where patriarchy and gender differentiation is materially reproduced. The gender division of labour within the family is fundamental, she argues, to the reproduction of capitalism and patriarchy. Her position thus offers a materially grounded analysis of patriarchal ideology and interests in women's domestic labour unaccounted for in Young.

Feminist scholarship has revealed the bias of the marxist orthodoxy in its narrow economic analysis of broad social issues and the limitations of the productionist focus. Between them feminists have enlarged the concept of the social and material, and correspondingly extended the range and complexity of the motive forces for social change by pointing to other ways and experiences of being in the world and kinds of social relations that the orthodoxy, stuck in its essentially nineteenth century analytical framework, have been unable to integrate.

A large strand within that feminist literature not mentioned so far has, of course, been centred on theorising women's domestic labour. The core debate has largely been conducted within traditional marxist economic categories.

A key question has revolved around the theorisation of the relation of unpaid domestic labour to capitalist accumulation and the reproduction of

capitalist production relations: essentially a quest to determine the value form of domestic labour. (Benston, 1969; Dalla Costa & James 1975; Gerstein, 1973; Gardiner, 1975; Seccombe, 1974; Coulson et.al., 1975; Smith, 1978). The language of this debate has, unsurprisingly, reached some extremely rarified levels of abstraction, and this has functioned to obscure other domestic social relations such as sexism within the family. In other words, whilst it has usefully elucidated how domestic labour supports capitalist production, it has suppressed the evidence that would explain why it is women that perform domestic labour by ignoring that men benefit from it, not just as labourers, but entirely. Put another way, domestic labour cannot be reduced to the economistic function of reproducing labour power: the abstraction labour power has no concrete reality. What is reproduced is an entire person - and thus domestic labour reflects a whole realm of human experience and activity encompassing psychological and emotional needs as well as material ones, as Jean Gardiner has recognised (1975). The argument is neatly distilled in the debate between Eli Zaretsky (1976) and Heidi Hartmann (1979b).¹

In summary, the feminist perspectives have exposed what blunt and ineffective analytical tools orthodox marxism has to offer in the analysis of sex/class issues. Insofar as feminist reformulations have uncritically relied upon traditional marxist economic categories, they too have fallen prey to the limitations of ahistoricism and economism. This is particularly true of the domestic labour debate, but dual systems theorists, however they conceive of the relation between capitalism and patriarchy, have also tended to stray toward the trap set by highly abstract and overgeneralised accounts. Nevertheless, they have been instrumental in demanding a truly social theory to account for gender construction and reproduction.

¹But see also: Bland et. al (1978) and The Women's Study Group, CCCS (1976)

Within the feminist corpus the socialist-feminists have come closest to formulations that unite the strengths of marxist and feminist perspectives whilst being aware of their limitations. The best example, in my view, is that of Young (1980). The history of all hitherto existing societies has not been the history of class struggle if class is constituted within the narrow framework of the production relations inherent in a fraction of the social formation, as orthodox marxists assert. In conceptualising gender divisions and relations within the material, Young has reinstated historical materialism, in its original and most fundamental sense, into feminist analysis, and is thus able to give historicity to women's oppression. As Marx & Engels wrote in *The German Ideology*, men 'begin to distinguish themselves from animals as soon as they begin to produce their means of subsistence, a step which is conditioned by their physical organisation' (1970:42). Productive activity is social activity and the division of labour is social organisation, and it was through productive activity that men (read humanity!) established their relationship to the world of nature and other members of society. As the feminist consciousness makes clear, social life and its reproduction encompasses all labouring activity, and the gender division of labour in society is central. This idea forms the fundamental question to which this work is addressed. If the gender division of labour is central to women's subordination in society, then what reproduces gender? Just how is sex translated into gender, how is it socially constructed and maintained? Before we can proceed, some rejigging of the conceptual framework needs to be carried out.

The drawback of Young's work and a characteristic of all the marxist and feminist perspectives discussed here, is the high level of abstraction at which they operate; a feature which makes them unwieldy analytical tools.

In discussing them so far it is apparent that such theoretical sledgehammers smash the concrete nut of reality into smithereens. Bludgeoned into fragments, the pieces of empirical reality defy attempts to put them together again. As we have seen, all the empirical variations and objections raised against the adequacy of these formulations, simply cannot be reconstituted; they refuse to fit into the original highly abstract puzzle. Theory building thus proceeds like a solving a Chinese puzzle; very often we are left with pieces of the puzzle lying around whilst our best attempts at reconstituting the structure produce something which now looks very different from the original. Much of real concrete empirical variation thus gets pushed to the theoretical margin, or noted as exceptions in footnotes. This does not imply throwing away the puzzles in disgust. Their value lies in the direction to which they point. In Young's contribution it follows from the logic of historical specificity implied in historical materialism that what we need is a historically informed and empirically grounded analysis.

However, there are problems with the classic marxist notion of historical specificity. Whilst asserting the importance of concrete reality and the value of empirical observation in a particular historical moment, too often the 'moment' of history defining the boundaries of the specific is restricted to the mode of production; to what is different under capitalism, say, relative to earlier epochs. But, as Marx acknowledges when pointing to combined and uneven development, in any historical moment the social formation contains elements of past modes of production as well as progressive elements; a mode of production does not exist in a pure and absolute form; it is given by relativity. Orthodox marxists forget that the categories they take from Marx's analysis in *Capital*, relate precisely to an abstraction: a pure mode of production, but which Marx makes clear proceeds from empirical reality; from 'earth to heaven'. To point this up, it is useful I

think to see this processual view of history as the social theory equivalent of Einstein's scientific principle of relativity. The highly abstract level of analysis at which the marxist and feminist theories discussed here proceed, forces them to ignore the 'impurities' within the social formation or, to extend the analogy, their position is analogous to Newtonian physics' absolutist notion of space and time.

In the same way that Einstein reveals in the General Theory of Relativity that whilst the same relations hold between time, space, distance, speed, mass and force for all observers, the values (in a mathematical sense) for time etc., we observe are variable depending on our relative position in time and space, I want to argue for a similar conception in social analysis. Standing in a particular time/place (concrete empirically grounded observations of the social world) our observations are contextual and are therefore as various as the positions and times of observation we take up. The questions posed by abstract theory about social relations have to be answered, so to speak, relatively. Put differently, what I am arguing is for a much more fine-grained notion of historical specificity given by the time and place of our observations; by concrete analysis. Such an approach immediately admits all those variations and exceptions that currently defy attempts to be squeezed into abstract conceptual boxes. Moving from abstractly given questions to the concrete social context and back again allows us to map the contours and limits of systems like capitalism and patriarchy on a basis other than conjecture, and allows theory to develop as a process in itself. In Einsteinian terms, the abstractions of theory elucidate the relations, and empirical observation the values. Einstein himself conceived physics not as events, but observations, and that relativity was the understanding of the world not as events but as relations. For instance, instead of being stuck in the static nineteenth century economic categories of

orthodox marxism that a rigid adherence to the marxist notion of historical specificity requires, a more processual view of history allows us to see and make central the differences say between nineteenth and twentieth century capitalism; variations **within** the epoch or mode of production, or see that abstract claims for 'patriarchy' cannot illuminate class variations in patriarchal dominance or, similarly, appeals to 'the capitalist system' cannot explain the reality that women and men of the same class experience that system differently. As well as a heightened sensitivity to sex/class variations within a mode of production, i.e. time variations, a concrete and contextual analysis alerts us to the 'relativity' of space - that capitalist or patriarchal relations have variable values depending upon the geographical context too. Historical specificity implies historical variability and spatial specificity implies spatial variability.

In mapping this theoretical terrain we have ranged far and wide from our starting point of the persistence of sex segregation in the labour force. Bearing in mind the above, the approach here is to pose sexual segregation in paid work as a historical problem, taking Young's concept of the gender division of labour as central - to repeat and stress her words:

"A crucial aspect of the division of labour in every hitherto existing society is an elaborate gender division of labour that affects the entire society. Thus a complete analysis of the *economic relations of production in a social formation* requires specific attention to the division of labour." (1980:52, my emphasis)

This concept of a gender division of labour as a significant variable in dividing labouring activity throughout history is precisely the thing that is obscured by sexist orthodox marxist categories which exclude whole realms of material production, of social life. Viewed in this way, orthodox marxism's economism and productionist bias is itself a German Ideology:

"In direct contrast to German philosophy which descends from heaven to earth, here we ascend from earth to heaven. [...] We set out from real, active men, and on the basis of their real life-process we demonstrate the development of the ideological reflexes and echoes of this life-process." (Marx & Engels: 1970:47).

In sticking with their nineteenth century categories that exclude all labour outside capitalist relations of production, the orthodoxy discard Marx's 'first premise of all human existence' and therefore, historical materialism:

"Since we are dealing with Germans, who are devoid of premises, we must begin by stating the first premise of all human existence and, therefore, of all history, the premise, namely, that men must be in a position to live in order to "make history". But life involves before everything else eating and drinking, a habitation, clothing and many other things. The first historical act is this production of the means to satisfy these needs, the production of material life itself." (Marx & Engels, 1970:48).

The production of material life presupposes the sexual division of labour.

At its most extreme, the division of labour between the sexes in procreation:

the ultimate force of production - a social relation which itself forms a new productive force. The sexual division of labour and unequal sexual relations in Marx's view then are fundamental conditons for the division of labour which entails:

"... the unequal distribution, both quantitative and qualitative, of labour and its products, hence property: the nucleus, the first form of which lies in the family, where wife and children are the slaves of the husband." (1970:52)

As a fundamental condition and first historical act of material life, the sexual, or gender division of labour and relations are no less central today, as Marx makes clear they are transhistorical:

"And indeed this [production of material life] is an historical act, a fundamental condition of all history, which today, as thousands of years ago, must daily and hourly be fulfilled merely in order to sustain human life." (1970:48).

Foord and Gregson have noted too that gender relations are transhistorical in nature: "they exist because people are always and everywhere gendered" (1986:199). They approach the problem of conflating historical specificity with a mode of production rather differently but arrive at a similar conception to the one that takes shape above: that the social relations specific to capitalism and patriarchy are respectively contingent forms of the general object "modes of production" and gender relations, or, as I have put it, the production of material life organised through the gender division of labour. Thus gender relations are, as I have argued, and they put it, 'an object of analysis in their own right' (1986:201).

As I have argued, the relation between capitalism and patriarchy and modes of production and gender relations is the relationship between the historically specific and transhistorical relations. Foord and Gregson put this rather well and I can emphasise my point no better than by quoting them at length by way of a precursory explanation of how the method of analysis in this work proceeds: this is what they say:

"Another illustration relates capitalism with patriarchy, modes of production with gender relations. Gender relations, while important to an understanding of the composition of specific social relations in particular periods and places are not necessary to a conceptual understanding of social relations within specific modes of production. We do not, therefore, need to understand gender relations to achieve a theoretical understanding of, say, the capital-wage labour relation. But we do *need an understanding of gender relations if we are to understand how this relation is manifested in practice, both historically and spatially*. Similarly, we do not need a theoretical understanding of the specific capital-wage labour relation to understand the theoretical constitution of patriarchy. Capitalism and patriarchy, then, are contingently related structures, which, nonetheless, interlock in the specificity of particular periods and places." (1986:200, my emphasis).

In other words, the forms of gender relations vary over time and space and they do so in articulation with the historically given specificities of which

patriarchy is a form of gender relations and capitalism is one historical circumstance in which patriarchy exists. Beyond this all we can say is specific social relations will be mediated by gender relations: for the rest we have to go and look.

Under capitalism the gender division of labour refers first to the allocation of labouring activity between home and work, economy and family, production/reproduction, paid and unpaid labour, in public and private spheres of social life. These are the historically specific forms of the transhistorical gender division of labour as we experience it in capitalist society.

As a fundamental social division of labour, gender has a much broader dynamic and is as important as class for our analysis, for it is also the basis for allocating labouring activity between men and women **within** the divisions of home and workplace, **within** the family and economy, **within** capital-wage labour production relations and domestic labour. It is this assertion of the gender division of labour and gender relations that the economism of orthodox marxism denies - paradoxically by treating capitalist wage labour as the totality of human labour; undifferentiated by gender.

The initial focus for analysis in this thesis is thus on that exclusion period by marxism, namely the philosophic separation of the family and economy in the nineteenth century, in the transition from domestic to factory production. This historical analysis elucidates the capitalist form the gender division of labour takes between wage and non-wage labour. From this we can see that a central aspect of the social reproduction of gender itself is the relation to capitalist production relations. A large part of the social construction of masculine and feminine gendered subjects under capitalism

derives from this relation to production. This may seem obvious in the case of men whose social meaning (masculinity) is in large part intricately bound up with their relations to production, with their role as wage labourers. But being a non-wage labourer is still a relation to production, precisely because it is outside them. What I am saying is that work, material life, in its capitalist form, has become central to socially constructing gender.

The gender division of labour under capitalism between home and workplace defines women primarily in terms of the family and domestic labour and men as wage labourers under capitalist production relations: the social gender division of labour. But this social division did not appear overnight with the arrival of capitalism. The historical reshaping of the gender division of labour was a process of struggle between men and women - a struggle of gender relations - that took place within capitalist production relations within the workplace, as well as with reference to gender relations within the home. It was not simply a case of men following economic activity to its extra-domestic locations, for women and children too were just as likely to work down the mines or in a factory during the early period of industrialisation.

Whilst industrialisation creates the spatial division between home and workplace as productive forces develop, this fundamental spatial division of labour was not therefore inherently a gender division of labour: it is not inherently patriarchal in nature. Patriarchal dominance of social production under domestic relations of production that gave men authority through material control of family labour and the surplus they produced, was potentially destabilised by women's waged work outside the home. The normalisation of patriarchal dominance (gender relations) was achieved, as we shall see in the historical sections covering the transition from domestic

to factory production, in two prime ways. Firstly, through attempts to exclude women from paid labour altogether through male combination and protective legislation. These practices re-established the material base of their authority within the home by constructing themselves as 'breadwinners' evidenced by the subtle transition in the meaning of the 'family wage' during this period from one that signified one to which all family members had contributed, to one that meant the male breadwinner's wage for the maintenance of his family. Secondly, where men and women worked alongside one another as wage labourers patriarchal authority was reasserted through authority relations within the workplace that mirrored those previously held under domestic production. Men in the workplace, through internal sub-contracting systems, had effective control over women's wage labour, as was the case in early factory production in the cotton industry, but patriarchal gender relations within the workplace also structured women's paid work through the sexual segregation of paid work itself.

From the historical studies we can see then that the specific forms of the gender division of labour and gender relations are refracted through the prism of the division of labour and social relations given by the mode of production; by the capitalist spatial division of labour and the relation to production and wage labour on the one hand, and by gender relations within the technical division of labour within the workplace on the other.

Whilst the mode of production, capitalism, gives the conditions for the gender division of labour and gender relations, it is thus real men who make history:

"Men make their own history, but they do not make it just as they please, they do not make it under circumstances chosen by

themselves, but under circumstances directly encountered, given and transmitted from the past." (Marx, 1869:96)

As such, the gender division of labour and patriarchal gender relations become part of the nature of capitalism itself. The gender division of labour and its attendant gender relations presuppose gender, socially constructed men and women. The social construction of gender under capitalism takes place in relation to paid work: inside or outside the relations of production. The establishment of the male breadwinner norm during the nineteenth century also thus entails female non-wage labour because gender is a **relation** and therefore genders are necessarily constructed in relation to each other. The construction of one side of the relationship is therefore simultaneously the construction of its opposite. That historical reshaping of the gender division of labour formerly contained within the family and domestic production was, in the transition to factory production, also a process that varied geographically.

The spatial division of labour laid down during industrialisation produced a mosaic of historical industrial geography based on regional specialisation that fostered regional identity and came itself to shape our notion of region¹. The historical pattern of women's participation in paid work outside the home has in many cases been related to the nature of men's work in these regions. Variations in the spatial division of labour thus had their parallel in the gender division of labour between home and workplace. Unlike men, women's participation in paid work outside the home has been grossly uneven spatially. In regions where the nature of men's work has entailed high domestic labour inputs due to the dirtiness and shiftworking patterns of men's industrial work, such as the coalfields and other traditional industries like shipbuilding and metal manufacture with strong regional bases, the

¹ See Langton (1984), Freeman (1984) & Gregory (1978).

participation of women in paid work has traditionally been low. An important part of the social construction of women, of femininity, then, has come to be associated with the sexual division of labour between home and workplace, the social division of labour. Historical industrial geography and the sexual-spatial division of labour has, for women, been conditioned by men's role as wage-labourers and the nature of that work. Where women have entered paid work in large numbers, as they did in the nineteenth century cotton and potteries industries of Lancashire and North Staffordshire respectively, both the gender division of labour between home and workplace and gender relations within the home and workplace were destabilised. The fact that the social construction of gender and gender relations are closely associated with these divisions under capitalism is evidenced by the fact that women factory workers were often seen as 'out of place', as unfeminine, as we shall see.

However, this spatial division of labour of capitalism that gives rise to variations in gender relations over space through the structuring of the gender division of labour, also varies over time, along with the developmental dynamic of capitalist society. Changes in the nature of work and its organisation within the workplace (the technical division of labour) and in the spatial organisation of production under capitalism (the spatial division of labour) therefore potentially destabilise the established gender division of labour and gender relations between home and work and within the home and workplace.

A second strand of the analysis here is therefore to compare the two historical regions over time. Similar to the way 'industrialisation' was a period when the gender division of labour was in flux, the contemporary period of economic restructuring and changes in the labour force we

documented at the outset is also a point at which gender relations are most likely to be observable in the change process itself. What I mean by this is that during such large changes the gender division of labour and gender relations have to be restated and reimposed in a way consistent with the new reality - men really do make history in circumstances not of their own choosing! These historical circumstances are given by the changing technical division of labour and spatial division of labour, the changing spatial organisation of production. As noted in the final section of Chapter 2, wider economic changes have had different spatial effects as a consequence of confronting the uniqueness of localities and regions; itself a product of the previously established spatial division of labour: the differential historical experiences and roles of localities and regions.

The significance of these changes in the spatial division of labour for geographical differentiation in class relations is now well-established through the work of Urry, Cooke and Massey (see Section 2.3), where the spatial division of labour is seen as giving rise to different sets of social relations between capital and wage labour.

Another contribution by Storper & Walker (1983) to tackle these issues is of particular interest here. A key strand of their work constitutes a critique of traditional location theories that are based on neo-classical economic assumptions that lead to the explanation of spatial shifts in industrial location (i.e. the dynamic of the spatial division of labour) as the outcome of a calculation by firms of the relative price (wages) and quality (skills) of labour, evaluated in the same 'value for money' way as other commodity inputs to production (raw materials, transport etc.). Any, or a combination, of these factors are seen as influencing location decisions. Against this

Storper & Walker argue, firstly, that labour is not reducible to skills and/or a price tag because labour is fundamentally different from true commodities:

"There is no guarantee that the employer will get what is paid for, even in the fairest exchange. Performance capacity is not the same as actual performance because of the worker's ability consciously to limit or otherwise regulate his or her work effort."(1983:6)

Secondly, they argue that the development of capitalism has increased the locational capability of firms (through the development of transport and communications technology, internationalisation of markets and production, new synthetic materials etc) with the effect that non-labour factors of production are becoming spatially homogeneous. Thus, they no longer possess the weight once attached to them in location decisions and, as a consequence, capital becomes more 'attuned to labour force differences' (1983:4).

However, the annihilation of spatial differences which such developments enhance, is inherently impossible to achieve with respect to labour because labour is inert in the sense that it is reproduced in place. But this reproduction in place outside production is only part of labour's reproduction. Most fundamentally the social character of labour is reproduced within the production process itself. As Storper & Walker point out, workforces are historically constituted in a particular place around a particular spatial division of labour, a pattern of industrial geography. Thus the spatial division of labour arises out of variations in the nature of labour demand or, put differently, the spatial division of labour is a spatial division **within** labour and regional workforces are created out of the spatial organisation of capital itself. Put simply, the labour supply is always uneven because the nature of labour demand itself is uneven between industries. This uneven labour demand emanates from the differences in the

products being produced. According to Storper & Walker the very nature of a product gives rise to distinct types of production process and therefore a distinct character of labour associated with it. Not only this, but other operating conditions (markets etc) give individual industries a context that sets the possibilities and limits for changes to production methods, markets, the application of technology and the organisation of production. Ultimately these contextual conditions derive from the nature of the product being produced, and these core differences between industries in product type in turn call for different kinds of labour; different levels and types of skill.¹ Therefore, contrary to the capital logic school account (of which Storper & Walker's work is in part a critique) which posits that general structural forces such as competition and class struggle evoke the same universal and uniform 'deskilling' strategy (qua Braverman) these common forces lead industries down different evolutionary paths (1983:25). Changes in the nature of work and variations in labour demand, however, confront a spatially fixed labour supply which is the living repository of past spatial divisions of labour. Thus, workers possess an 'ensemble of qualities', a 'bundle of potentialities' that they take to work based on past experience in and out of work (1983:32). A major force shaping this local character of labour is the experience of work and the social relations of production: so that the spatial division of labour is a spatial division **within** labour:

"... the shifting industrial and social base of an area deposits layers of communities adjacent or on top of one another in a complex mosaic that is only imperfectly adapted to present conditions." (1983:32).

¹The tableware division of the pottery industry case study documented in Chapter 5 is a classic illustration of this determining character of the product, but it appears in other industries examined, for instance in footwear, where the requirement that shoes conform to the human anatomy places constraints on basic design and therefore on the technology of its production, and in biscuit manufacture where natural variations in flour strengths arising from the variations in wheat strains and growing conditions make prediction of other additives such as raising agents and baking times very difficult to control automatically.

The dynamic of changes in the spatial division of labour is, therefore, for Storper & Walker, these geographical differences between workforces that to a large extent derive from the historical patterns of the spatial division of labour; spatial divisions that are continually depositing layers of social relations between capital and labour which localities echo and rebound back to confront later and new spatial divisions of labour.

Now, Storper & Walker's contribution is important in centralising labour supply as a factor in the capitalist organisation of production in space, and in pointing to the way that supply is always spatially uneven in qualitative and quantitative terms. Regional workforces differ in terms of cost, militancy and skill level and type: differences shaped by workplace relations and the unique experiences of past articulations with capital that localities 'carry' in the local consciousness of their own history; a history of place.

Even so, their analysis misses a crucial division **within** labour - the gender division of labour. Labour for Storper & Walker is just that - labour - at a cost, bearing skills, militant or no. Implicitly it is male labour. This steers them away from considering that big spatial division of labour that we here make central: the gender division of labour between home and work. Constraints on the labour supply of women (the nature of men's work in a region, and women's position within the domestic division of labour) are thus not taken into account. Similarly, given their recognition that social relations at work are central in constructing labour over space, it is perhaps a worse sin of omission to ignore the way skills and gendered labour itself is shaped within these relations at the workplace. Women are admitted as relevant by Storper & Walker only where they deviate from the masculine norms of supply characteristics so that cheap women supplant expensive

men, docile women replace militant men, and skilled men are substituted by unskilled female labour. Hence, labour demand for women workers is regarded as mutually defined by and arising from the supply characteristics of men themselves.

This brings us to a major theme of this thesis: that gender is constructed in the gender relations between men and women, both inside and outside the workplace. Just as the spatial division of labour and history operate in Storper & Walker's analysis to shape labour, so I conceptualise the added dimension of the gender division of labour and gender relations nested and operating within these capitalist social relations.

Labour, as Storper & Walker recognise, is not solely constituted inside factory gates, nor exclusively outside them, but out of the interaction of capital and labour over time. Similarly, masculinity or femininity is not constructed purely within the home or exclusively at work, but out of the interaction of the two. As I have begun to argue, there are vast spatial differences between genders corresponding to the gendered division of work and home. This is one part, and an important part, of constructing gender as a relation to production - as paid or unpaid labour, with all that means in a cash nexus capitalist society. But, also, gender is constructed at work so that the spatial division of labour that is (following Storper & Walker) a spatial division **within** labour, is a **gender division within** labour too. As such it is an important facet of the organisation of capital in space. In other words, the framework provided by Storper & Walker is the context within which the gender division of labour and gender relations are shaped.

As mentioned in the introductory chapter, I have chosen to focus on the spatial division of labour and the intra-workforce side of this equation as

one side of these much wider relations, but it is the one that I wish to explore. Therefore, what I set out to do is explore the construction of the gender division of labour within the workplace and within particular regions, and examine how these have changed over time. I do this by using a four-way comparison along the axes of space and time. On the one hand, we look at two regions in the nineteenth century and the same regions in the twentieth and, on the other, focus on the changes over time within each region. This structure allows us to draw out in the final chapter the way social construction varies spatially and temporally.

As indicated earlier, the starting point is the historic separation of home and work, and this now follows prior to moving on to the two study regions.

3.5 The Reshaping of the Gender Division of Labour in the Nineteenth Century

Industrialisation is held to have produced a radical change for women generally. Contemporary observers regarded the novel spectacle of women's wage labour in the textile factories as signalling a revolution in work for women, fostering greater occupational diversity and labour force participation. Yet, as Pinchbeck (1981:1) points out, the industrial system did not produce the woman worker; women had always been engaged in productive work in every social system throughout history. It is nonetheless easy to see how such prophecies arose from such seemingly novel observations, limited as they were to the transition from domestic industry to factory labour.

For contemporaries, this was indeed the first time women's work was observable to a significant extent:

"...for centuries, under the handicraft and domestic systems, the greater part of their work was carried on in the home and there taken for granted"(Pinchbeck, 1981:1).

Furthermore, such prophecies were predicated on the peculiar experience of regions like the Lancashire textiles area and the Staffordshire Potteries which were among the first to develop the factory system. They were also coloured by the idea that working-class wives "were not supposed to work, at least outside the home" (Stearns, 1972:113). Apart from these industries, factory work for women constituted an infraction of their 'proper' role and sphere. The fastest growing employment for women during early industrialisation was domestic service, which was the largest employer of women throughout the nineteenth century, second only to agricultural labour (Cohen, 1984:297&300). Situated within the domestic setting it was not seen to infringe the separate spatial spheres of the newly emerging gender division of labour. Even at the end of the century, a survey of the levels of married and widowed women's work in different towns ranged from less than 10% in Swindon and Newcastle and did not exceed 20% in the largest cities, including London and Manchester. These levels of participation were only exceeded in the textile and pottery towns where, for instance, Blackburn (the largest workforce in the world in cotton at this time) had close to 40% of married women working. (Stearns, 1972:114). These women were the outstanding exceptions.

It was both the visibility of women's work in these industries 'simply doing in the factory, under different conditions, the work they had always done in their homes' (Pinchbeck, 1981:197) and the disastrous consequences this was believed to have on the domestic life of the working classes that was so remarkable in contemporary accounts. But Pinchbeck notes that this was often based on an exaggerated notion of the extent of married women's work:

"Contemporary statements...frequently give the impression that every woman in a factory above the age of eighteen was a wife and mother" (1981:197)

In fact, the majority left factory work upon marriage; in some cotton mills due to a marriage bar (ibid:198) whilst other occupations were traditionally followed by married women. Agricultural labour was much more the cause of married women leaving home for long periods, so that, as Pinchbeck observes:

"With greater justice an outcry might have been raised that women's agricultural work was ruining the home life of the countryside" (ibid:199)

Nevertheless, it was not so much that single and married women worked in Lancashire and Staffordshire, but that a large proportion worked outside the home in factories, and continued to do so after marriage to a greater extent. (Stearns, 1972: 110)

The factory was regarded as the antithesis of the feminine virtues extolled in the social ideal enunciated by middle-class reformers, which placed the woman in the 'natural' sphere of the home; values which had become established in working-class culture generally so that:

"only the sick or the depraved sent their wives out to work, and indeed *outside the textile towns* only women whose husbands were ill or injured or drunkards or otherwise unemployable normally worked" (Stearns, 1972:113, my emphasis)

These sentiments were echoed by such as Peter Gaskell, who viewed women's paid work as depraved and unnatural (Thomis & Grimmett, 1982:25). Set within this cultural and ideological context, women who worked outside the home were thus viewed as unusual, unnatural, and married women who did so, 'out of place' and unfeminine.

3.5.1: Nineteenth century domestic ideology: the spatial separation of the gender division of labour

At the beginning of 'The Rainbow', D.H. Lawrence describes the Brangwen farming family thus:

"They (the men) knew the intercourse between heaven and earth...feeling the pulse and body of the soil...they mounted their horses, and held life between the grip of their knees...the men sat by the fire in the house where the women moved about with surety. The women were different...[they] looked out from the heated blind intercourse of farm-life. They were aware of the lips and the mind of the world...they heard and strained to listen...Her house..faced out...to the road...and the far-off world of cities and governments and the active scope of man...She faced outwards to where men moved dominant and creative, having turned their back on the pulsing heat of creation...to enlarge their own scope and range and freedom; whereas the Brangwen men faced inwards to the teaming life of creation, which poured unresolved into their veins. In the close intimacy of the farm kitchen, the woman occupied the supreme position. The men deferred to her in the house, ... on all points of morality and behaviour. The woman was the symbol for that further life which comprised religion and love and morality. The men placed in her hands their own conscience, they said to her 'Be my conscience-keeper, be the angel at the doorway guarding my outgoing and my incoming'". (Lawrence, 1915:8,9 and 19)

Born in 1885, Lawrence echoes the Victorian middle class ideal of womanhood as the 'angel in the house' already established during his parents' early married life. Whilst these early passages are intended to convey the narrowness of farm life, the world revealed to Mrs Brangwen is populated by men, and Lawrence never hints that she (intensely curious as she is) might cross the farmhouse threshold to take a closer look at her vision. Instead, she resolves to experience the world through her youngest son by sending him to Grammar School. Like the Evangelical morality that informed the 'domestic ideology' espoused by the emergent industrial bourgeoisie, Brangwen women were the guardians of family morality:

"She was the anchor, the security... the restraining hand of God" (Lawrence, 1915:19)

But that moral fibre took its strength from as little contact as possible with the world against which they were expected to erect a 'haven' in the Evangelical scheme of things.

Concerned as they were with the anti-slavery campaign, and 'over the reform of manners and morals' in their attack on the aristocratic view of women, the Evangelicals forged a "new view of the nation, of political power and of family life" (Hall, 1979:15) The Evangelicals were important in lending a set of morals and values to the cultural and ideological capital of the new industrial bourgeoisie whose "way of life involved a recodification of ideas about women" (ibid).

The new middle class women largely withdrew from direct involvement with business - Evangelicalism's concern was to define a 'way of life best suited to their affluence and leisure' (Hall, 1979:23). As Hall argues, the French Revolution had provoked a keen debate during the 1790s on the nature and role of women, taken up on the one hand by such as Mary Wollstonecraft, whose argument was essentially 'a plea for equality with bourgeoisie men' through better education for women so that they could take their place in the world, whilst Evangelicals on the other rejected any notion of sexual equality, based on their belief in a natural division between the sexes in which women had important duties to perform in the home (Hall, 1979:22). It was their linking of religion and domesticity that prevailed. The extension of these ideas to the division between the public and private sphere drew: 'the basic split [as that] between the world as hostile and the home as loving' (ibid:24). The home and family became the essence and expression of the way to lead a moral and religious life. Their 'intensely private passions for sincerity and terrible truthfulness, with great

emotional warmth on moral issues' had to be carried on a moral mission: 'into a public sphere which might be...hostile' (ibid). This moral crusade was, however, the prerogative of men (women being allowed a limited supporting role in philanthropic activity) so that:

"the split between the private and public spheres became a split between the sexes of a peculiarly exaggerated kind. Home became the sphere of women and the family; the world outside became the sphere of men". (Hall, 1979:24)

Yet women were regarded as having an important role to play in the 'struggle to reform and revive the nation' through sustaining and improving the moral qualities of their husbands and offspring. Battle weary men, contaminated by the hostile world, and in danger (in Wilberforce's view) of distraction from pious concerns as a consequence of engagement with 'the bustle of life', could return to their wives who were untainted by such 'worldly cares or professional labours', to be reconstituted by their 'warmer and more unimpaired spirit of devotion' (Hall, 1979:26). Women, for Wilberforce, had a noble office to perform:

"...we would make them...the medium of our intercourse with the heavenly world, the faithful repositories of the religious principle, for the benefit of both the present and the rising generation". (Wilberforce, 1797, cited in Hall, 1979:26)

These same sentiments were to be expressed by Lawrence just over a century later as characterising the traditional life adhered to by the Brangwens in which the women were 'the restraining hand of God'.

Moral excellence in the home was, for middle class women, in part achieved by good domestic management of the household and its servants, and improved education for women was sanctioned on the grounds and to the extent that it enhanced their management capabilities or good motherhood;

especially in exerting a correct moral influence on offspring and particularly daughters, who were to be created in the mother's own image. This training for moral excellence was not for the 'daughters of the poor', however. They were to be:

"trained as servants or as good wives [emphasising] industry, frugality, diligence and good management". (Hall, 1979:28-29)

This domestic ideology of the industrial bourgeoisie was to become commonplace in Victorian society by the mid-nineteenth century and 'good management' in the haven of the home was thought proper for all women; though directed to different ends for working class women.

It was within this ideological and cultural context that contemporary observers viewed the women employed in the Lancashire cotton mills, whom they singled out for 'special treatment'. From the spectre of women's paid work they deduced that the entire social fabric was under attack - that 't'world is turned upside down' in those immortal words of Robert Pounder written to Oastler and recorded by Engels. As Hall argues:

"The bourgeois family was seen as the proper family, and that meant that married women should not work". (1979:31)

But it was not so much that married women worked in Lancashire that commentators balked at, but that they did so outside the home. Engels seems to concur with Pounder that the world was upside down but appears to redeem himself with the reflection that if rule of the wife over the husband might be unnatural then the reverse might also be the case. He nevertheless goes on to bemoan the fact that factory girls had little opportunity to acquire skill in household duties and were, as a consequence,

"wholly ignorant of housewifery and are quite unfitted to become wives and mothers" (Engels, 1958:165-166)

The working wife and mother was pilloried as irresponsible:

"Factory work [took them] away from the home during the day. It gave women wages that made them pert and cocky and encouraged them to neglect their homes in favour of their own clubs and friendly societies". (Liddington & Norris, 1979:49)

But as Liddington and Norris point out, the claim that married women lived wilfully independent lives was largely ill-founded (1976:50). It was more the potential disruption to future family life Victorian critics of the factory system foresaw in the independent behaviour of single women. Thus Mrs Gaskell noted in *North and South* how girls leaving the mill 'came rushing along with bold fearless faces, and loud laughs and jests, particularly aimed at all those who appeared to be above them in rank and station' (1976:49).

These same girls, it was lamented in a parliamentary report of 1843:

"were prevented...from learning needlework...cleanliness, neatness and order, without which they cannot, when they grow up to womanhood, and have charge of families of their own, economize their husbands' earnings, or give to their homes any degree of comfort". (Pike, 1966:205).

Peter Gaskell, that contemporary but no relation of Mrs. Gaskell, put it more forcefully:

"Nothing would tend more to elevate the moral condition of the manufacturing population than the restoration of woman to her proper social rank: nothing would exercise greater influence upon the form and growth of her offspring, than her devotion to those womanly occupations which would render her a denizen of the home...snatched from unremitting toil and made what nature meant she should be...the poor man who suffers his wife to work, separated from him and from home, is a bad calculator". (P. Gaskell, cited in Engels, 1958:164)

Clearly work outside the home by Lancashire women cotton workers was seen as immoral and unnatural and the cotton mills as a battleground that was proving fairly intractable to the Evangelical forces for a reform of manners and morals. Yet as Gita Sen points out, it is only with the advent

of capitalist industrialised production that domestic management, childbearing and childrearing becomes problematic. As the locus of production shifts from the household to the factory, definitions of women's work are affected. The home is now the locus of consumption and reproduction making it difficult to:

"interweave the tunes and rhythms of production and consumption which become separated from each other in both space and time" (Sen, 1980:82)

Transition in the meaning of the family wage:

This assertion of a national consciousness and ideology in an attempt to normalise patriarchal gender relations was accompanied by a similar shift in the meaning of the family wage that gave a material impetus to the gender struggle. In many regions it was to provide a central plank in patriarchal gender relations within the home in conferring breadwinner status upon male heads of households. It corroborated the capitalist spatial separation of the gender division of labour between home and work and made women's paid work of secondary importance to the family, since their non-breadwinner status often justified much lower pay than men. Men's relation to and **within** production now became primary in their construction as masculine, and femininity became largely centred on women's relation to production, that is - outside production relations altogether. As the following quotation from Pinchbeck shows, the transition from a collective family wage to a breadwinner's wage was initially viewed cautiously by men in textile districts:

"When machine labour did away with the necessity for [the manual assistance of women and children so essential to domestic production] even the increased wages earned by men did not reconcile them to the economic dependence of their women and children who remained unemployed [under the factory system] at home. So accustomed were they to the idea of a *family wage* and the contribution of women and children,

that the substitution of an individual wage and the responsibility of the father for the entire support of his family were changes which at first were neither welcomed or understood". (Pinchbeck, 1981:122)

It was indeed problematic for, as men of the time recognised, the non-breadwinner status of women made them serious competitors for jobs as cheaper labour. The **individuation** of the wage form was integral to capitalist development, but, making history out of given circumstances, male workers resolved the threat to their patriarchal dominance of paid work by engaging in a gender struggle to exclude women workers from skilled occupations at the workplace through the trade union movement. In doing so, as Secombe (1986:55) shows, they actively constructed and shifted the **subsistence norm** away from a family group's income towards the ideal of a male breadwinner wage. The transition in the meaning of the family wage, so important to guaranteeing patriarchal gender relations within the home, was the outcome of capitalist development and gender struggles between men and women over allocation to that most fundamental capitalist form of the gender division of labour: the spatial division between home and paid work.

However, in regions where capitalist industry developed out of an already extensive domestic industry, women's contribution to the family group form of the family wage was difficult to deny. It was in these regions where women entered factory work in large numbers and enjoyed the independence of a wage, and where the force of these national shifts in the meaning of family wage and the supporting domestic ideology appear to have had a much weaker hold as a result, as Liddington and Norris record (1978:53,54,97).

Nearly all the examples, once again, come from Lancashire as the region which most captured the imagination of commentators of the time. The publicity and scandal that surrounded working women in the region has set the reference point for later research of this period of women's history, to the extent that experiences in other important areas, like the Potteries, have repeatedly been overshadowed and remain relatively unexplored.

3.6: Lancashire cotton-mill workers: symbol of the working woman

The prevailing domestic ideology seems to not have percolated down to Lancashire with the same strength as elsewhere, for the factory girl stood out 'in bold individuality and apparent unconcern for conventions' (Pike, 1966:220). Lancashire power loom weavers were the highest paid female labour in the land. They dominated women's employment to such an extent that evidence given to a parliamentary report on Handloom Weavers in 1840 records that so abundant was profitable employment for females in cotton textiles that:

"Domestic servants are in consequence so scarce, that they can only be obtained from the neighbouring counties" (Pike, 1966:230).

Even the cardroom women, the lowest-paid in the mill, commanded higher wages than women elsewhere (Liddington and Norris, 1978:87).

The independence gained from high wages was reflected in the spending patterns of single women workers who experienced 'partial escape from their parents, spent a great deal on clothing, and music halls and picnics commanded a significant share of their budgets'. (Stearns, 1972:110). Whilst some exercised their independence to leave home to 'become their

own mistresses' (Pinchbeck, 1981:313) others remained at home, resulting for Peter Gaskell in the 'crying and grievous misfortune' that each child:

"ceases to view itself as a subordinate agent in the household [but] as lodgers merely, appropriating any surplus which may remain of their wages to their own private purposes, accountable to no one for the mode in which it happens to be used or wasted" (cited in Pinchbeck, 1981:313).

Whilst many Lancashire women enjoyed such benefits of the regions' prosperity, unmatched by working women elsewhere, this varied across the region, the greater share accruing to single women in towns where weaving dominated (Pinchbeck, 1981:61).

Neither was this independence confined to their leisure and home life. Working women in Lancashire had a long tradition of radicalism, and nationally they were the best organised group of workers. In the 1890s the '90,000 or more women members of the cotton unions represented no less than five sixths of all organised women workers" (Liddington and Norris, 1978:84) though this organisational strength varied with occupation. The Cardroom Association was 'strong in numbers but weak in all other respects' due to their comparatively low skill and pay with the consequence that their struggles were limited to maintaining employment levels and establishing wage lists.

The male strippers and grinders, however, dominated the decision-making of the predominantly female membership. They were:

"often fathers of girl members [who] exercised an influence out of all proportion to their numbers" (Liddington and Norris, 1978:88).

Despite women's numerical dominance in weaving this too was rarely proportionately reflected in the organisation of the union, with the exception

of the Oldham and Wigan branches of the Weavers' Association where women 'were not only collectors [of dues] but sat on the committee' (Liddington and Norris, 1978:97) but even here at higher levels the men predominated. Yet this was clearly not regarded as beyond the capabilities of the women members as Julia Dawson complained in the *Clarion*:

"The whole phalanx of Lancashire representatives [to the TUC] were men, and yet there are more women than men in the weavers' union. It is a thousand pities that women hold back" (Liddington and Norris, 1978:149).

Whilst Victorian ideals of a 'woman's place' and their domestic priorities had a far weaker hold in the Weavers' Association (ibid:97) than elsewhere, 'domestic ideology' certainly seems to have come into play to temper women's radical activity as soon as this involved straying too far afield, especially on suffrage campaigns. Hannah Mitchell, in jail for interrupting a Liberal Rally was indignant that her husband, despite his sympathy with their campaign and knowing full well their policy on non-payment of fines, nevertheless turned up at Strangeways and paid her fine so she could go home:

"Most of us who were married found that 'votes for women' were of less interest to our husbands than their own dinners" (Liddington and Norris, 1978:217).

Others bypassed the constraint. Mrs Towler, of Preston, imprisoned after storming the Commons had beforehand 'spent a week baking for her family and left enough food to keep the five of them [husband and four sons] going for a fortnight' (ibid), whilst Selina Cooper, according to her daughter Mary, left a day-by-day detailed shopping list and accompanying menu to be followed whilst she was away campaigning (ibid:223).

Closer to home, however, women continued their long tradition of radical activity. In common with all women in England in the early part of the

nineteenth century they had been prominent in the many sporadic food riots. With the exception of machine-breaking in the Jenny riots of 1779 where women's jobs were threatened, their role is considered to have been largely one of spontaneous rioting and encouragement of crowds in the later disturbances over the steam loom which, in Lancashire, was more 'a convenient target for popular hostility'. (Thomis and Grimmett, 1982:48). Their fullest participation, however, occurred during the 1842 Plug Riots. Though these riots straddled the Pennines and extended to Nottingham and Staffordshire:

"...it was the Lancashire women who were the most violent: mills were attacked by women who forced gates and smashed windows in Manchester and Ancoats Vale, in Preston collected road stones to be hurled at police and soldiers, and gutted the police station at Newtown" (ibid:85).

Twelve years later they are recorded as playing a leading part in the Preston strike and, in the 1878 Blackburn riots, women strikers were again providing ammunition for the systematic attack on mills in the town, producing from 'their aprons...stones, pokers and other odds and ends' (Liddington and Norris, 1978:62).

Given such a tradition it is not surprising then, that industrial radicalism should become reflected in wider political demands in Lancashire. The national working-class men's popular movement for political reform that emerged out of the severe economic depression following the Napoleonic War, witnessed a no less vocal response by Lancashire women, who formed the first Female Reform Societies in Bolton, Blackburn, Preston, Manchester and Ashton-under-Lyne during the years 1818-19. They carried their banners for 'Universal Suffrage' at St. Peter's Fields on 16th August, 1819; the Blackburn contingent contributing its first martyrs as the only two women killed (Liddington and Norris, 1978:62). Yet neither of the Reform

Acts of some 50 years later 'paid any attention to the valuable contribution [of] women cotton workers'. Universal suffrage had been dropped by the Chartists as early as the 1850s in favour of manhood suffrage (ibid:63). But Lancashire was again to prove the pace-setter as the origin of women's suffrage:

"Lancashire women were as politically disadvantaged as all other Victorian women...yet despite this, women workers in the cotton towns were always in a considerably stronger position to demand the vote. They were better organised and better paid: they could call upon a tradition, however localised and sporadic, to strengthen their determination. It was no accident that the radical suffragists sprang from the cotton towns" (Liddington and Norris, 1978:63).

Lancashire as one of the first regions to experience industrialisation was to be expected to be the first to develop new forms of protest over non-traditional issues. The women of Lancashire, highly paid, highly organised, with a reputation for militancy and independence exercised their confidence in protest with and alongside the men, with no timidity for the front-line: and women in the Potteries, whilst 'less violent', also played a full part. Women such as this were hard to squeeze into the cheap, docile and pliant categories Marx reports as being preferred by one manufacturer for employment on his power looms (Marx, 1976:526). Equally, they did not conform to the 'angel in the house' ideal of Victorian Evangelicalism.

The reaction was to characterise factory women as 'unfeminine'; ironically in some cases, by pointing to their all too 'feminine' attributes which, in combination with their 'cockiness', was perhaps too much to bear for their commentators. Thus Peter Gaskell, noting the celebrated beauty of Lancashire women, asserted that those 'exceedingly graceful and feminine beings [with] a passion for admiration and attention ... must not be sought for amongst the precociously developed girls herding in factories'. There they are transformed from 'most excellent things in a woman' of 'retiring

bashfulness', coy reserve, delicacy of figure ... grace in her steps' and a voice 'soft and low' to acquire a 'general aspect of coarseness and vulgarity of expression' delivered in a 'raucous or rough timbre of voice ... closely resembling that of the male'. These qualities were seen as deriving from: 'too early sexual excitement'. These overtly sexual ascriptions were also frequently used to structure women's position within the technical division of labour, especially in the Potteries, as we shall see. More serious than her 'ungainly figure', and 'gait of a sort of waddle' being 'exceedingly ungraceful' was the supposed detrimental effect factory labour had on their childbearing and capacity for motherhood:

"...from ten to fourteen, the breasts are found large and firm and highly sensitive, whilst at a later period...when in fact they have children to support from them, they are soft, flaccid, pendulous and very unirritable - both states giving the most decisive proofs of perversion in the usual functional adaptation of parts..." (Gaskell, cited in Pike, 1966:221/2).

This independence, good organisation and supreme confidence of women in our study regions in tackling national political issues such as women's suffrage must certainly be due, in some measure, to the opportunities that gender struggles and relations within the workplace offered for their development.

The industrialisation of production during the nineteenth century that centred productive activity outside the home, together with the supporting domestic ideology and shift in the meaning of the family wage, established the broad gender spatial division of labour between home and work as a gender division of labour; production and reproduction. These changes re-established the material basis of men's patriarchal dominance within the domestic division of labour generally for, by and large, women were reinstated as unpaid domestic labourers, except this time the content of

domestic labour no longer included 'production' but became confined instead to reproductive labour in every sense of the term. The change in the meaning of the 'family wage' into one that would allow men to support wives without the need for them to enter paid work outside the home both consolidated this broad gender division of labour into spatially separate spheres and, simultaneously, frustrated and weakened women's general claim to paid work. A woman's place was now in the home, and 'femininity' constructed primarily around the domestic division of labour.

However, these general changes in the gender division of labour between home and work, and the reimposition of patriarchal gender relations they signified, did not take this spatial form everywhere. Two regions where this nineteenth century gender spatial division of labour was patently not the predominant form of gender relations, as we have seen, were Lancashire and Staffordshire where women's paid work outside the home was highly significant in industries of national importance. In the cotton factories of Lancashire and the potbanks of North Staffordshire the presence of women doing paid work starkly undermined the notion of the family wage as the male breadwinners' wage and contradicted the prevailing domestic ideology. At a national level, the women of Lancashire, along with 'pit-brow lasses', bore the brunt of the outcry against women workers in general. Locally, gender relations could clearly not be re-established on the basis of enforcing the split between the 'two spheres'.

In both regions this reconstitution of gender relations took place within capitalist production relations themselves - at the workplace. In both there was a carry-over of the patriarchal authority relations that had existed within the domestic production unit. Male workers in the two industries often, though not exclusively, employed members of their own family under the internal sub-contracting system that gave them authoritative control over

work effort and material control over earnings. These controls ultimately rested upon physical power and male violence, for there are numerous references to the physical ill-treatment of women and children under their supervision, especially so in the cotton industry¹. In the early potbanks this role often fell to the 'Bailee' - the dreaded overlooker of the potbank (Shaw, C., 1903:65,66,74) but sub-contractor potters are also recorded as meting out very severe punishment to their assistants with 'a rope an inch in thickness and clogged with clay' (ibid). Where they employed extra-familial labour authority was less direct, but always relied on the physical power of adult males.

Beyond these common authority relations, however, the social construction of masculinity and femininity and the normalisation of patriarchal gender relations in the two regions took place within the constraints set by the nature of the industries themselves and their associated technical division of labour within the firm and sector. If women could not be impelled to toe the national line and restrict themselves to unpaid domestic labour, then the resulting destabilization of the gender division of labour and relations within the home had to be refashioned by structuring women's paid work within the workplace. To paraphrase Marx: men make history with the materials to hand. The two historical accounts of the nineteenth century sexual division of labour within the cotton and pottery industries is thus where we begin the analysis in each of the two study regions.

A Note on the Structure:

I should just say a word more about the structure of the thesis. Because we have a four-way comparison, there were several permutations possible in

¹Male mule spinners are recorded as delivering 'lickings' up to six or eight times a day to their piecers. (Pinchbeck, 1981:186)

presenting it, but none that allowed all the strands to be cross-referenced within the same chapter. Many of these are pulled together in the final chapter, but it may help for you to bear in mind the paragraphs above where the four-way comparison is explained. Finally, the format of the chapters dealing with the regions (Chapters 5 & 6) is internally divided between the nineteenth century and contemporary case studies.

Before we launch into the regions, however, Chapter 4 outlines the case study methodology and some tentative hypotheses to allow you, as it were, to digest the regions as a whole.

Chapter 4

Methodology and Progression toward some hypotheses

4: ARRIVING AT THE CASE STUDIES

4.1: Aims of the Data

Clearly no continuity of data sets is possible for a historical time series analysis of this extent. The employment data needed to be at a sufficiently small spatial scale to permit aggregation into spatial units with as close a fit as possible with the historical 'region' as defined by the former industrial dominance: cotton textiles and pottery.

As noted previously, the delineation of the historical 'region' itself is generated from polymorphous historical sources but from which nevertheless emerges a consistent pattern of industrial geography. Thus for Lancashire it was possible to discern a clearly discrete socio-spatial division of labour with spinning concentrated to the south east of the county and weaving in the north and east extending up into the pennine valleys of Nelson & Colne and Rossendale. Mapping the spatial pattern of historical pottery activity in Staffordshire was likewise uncontroversial. The industry was extremely compact for geological reasons. Industrialising marginally earlier than cotton textiles, it was much more tied to the location of its raw materials prior to the opening up of the canal and rail network. The Potteries thus sprouted amidst the clay and coal deposits of North Staffordshire, which were otherwise costly to transport. Industrialised pottery production centred on the 'six towns', which today lie within the Stoke-on-Trent Travel to Work Area.

Similarly, the breakdown of employment data had to be sufficiently disaggregated to permit identification of the historical pottery and cotton textile activities within the

contemporary industrial nomenclature to allow as close a comparison as possible over time between the nineteenth and twentieth century industries. Fortuitously there has been remarkably little fragmentation of these industrial activities over time so that nineteenth century and contemporary definitions of these industries are broadly in agreement. In addition to these traditional industries it was a further criterion that the data showed what kinds of work characterised these areas today. There are two prime ways of doing this: by assessing the occupational structure across the two areas or by mapping their local industrial structure. Whilst occupational data is available at spatial scales small enough to be aggregated to fit the historical regions, these are based on a 10% sample only. A greater difficulty, however, in using occupational data would have been the problem of locating and interviewing sufficient numbers of individuals to compile a comprehensive picture for the region. MLH activities, as I describe below, were, with a bit of manipulation, easily identified with industrial establishments, which were both logistically easier to locate and, as institutions, offered obvious contacts for interview. Only data given by Minimum List Heading (MLH) of the Standard Industrial Classification meets these requirements. Finally and obviously the data should be capable of breaking down MLH activity by sex.

To summarise, the data sources were determined by the need to meet the following criteria:

- a) sub-regional scale
- b) disaggregated by minimum list heading (MLH)
- c) disaggregated by sex

Problems researchers frequently encounter such as major discontinuities in the data (such as changes in spatial coverage and inclusion criteria) did not impose any constraint. Nor was frequency a consideration, other than the data should be within

the restructuring period, since its purpose is merely to yield a picture of the contemporary industrial make-up and the relative importance of individual industrial activity headings for employed men and women in these areas today.

4:2: Suitability of the Data Sources

The following simple matrix (Table 4.1) displays the principal official sources available set against their ability to meet the defined criteria.

Table 4.1
Principal Official Employment Data Sources
Agreement with Set Criteria

SOURCE	CRITERIA			GENERAL SUMMARY	
	Sub-Regional Scale	MLH Level of Activity by SIC	Disagg by Sex	Advantages	Disadvantages
Census of Popn	Yes SAS: Enumeration Districts & possible to aggregate into TTWA's	No	Yes (Also by Emp. Status)	Empt & Occup Data. 100% data for empt status 10% sample for occupations	For all 'economically active' - incl unemployed. Spatial scale too fine. Often data out of date
Census of Production	No. At regional level & large conurbations within them.	Yes, until 1980. Subsequently for UK only, plus no service sector.	Yes	Within limits likely to be accurate except for small firm sector.	Spatial scale not fine enough. MLH breakdown not recent enough. Problems with confidentiality.
Census of Employment (ERII)	Yes EOA's able to be aggregated into TTWAs	Yes Covers all MLH codes	Yes Also by Emp. Status	Up to date - 1981 and '84 Covers only Employment Full list of MLHs	Confidentiality see comments at foot of table.

NOTES: *Clearance for all non-government user access has first to be obtained from the Department of Employment. The data is covered by Section 4(3)(e) of the Employment and Training Act 1973, which prevents disclosure of information from the Census which would allow the identification of individual establishments.

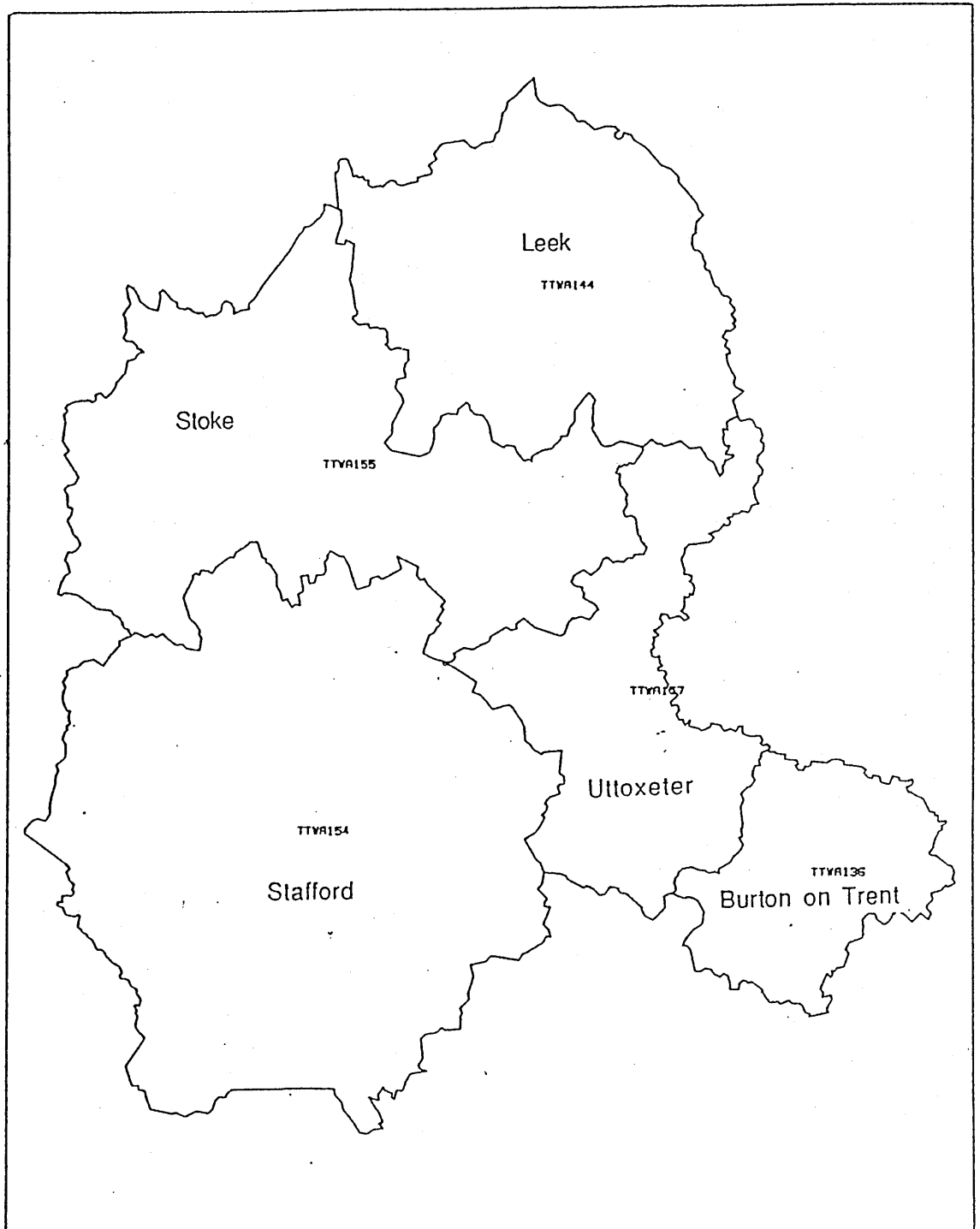
From the above, clearly the Census of Employment is the only official source of employment statistics able to meet all the criteria but, like many official sources, it suffers from the drawback of being provided in a form specifically designed to conceal the identity of individual establishments. Even so, with a little retabulation of the data, (described below) combined with information from other non-governmental sources, this confidentiality constraint is not insurmountable. The data is supplied to various spatial scales and the most suitable fit with the historical region is that of the Travel-to-Work Areas shown in Figures 4.1 & 4.2 below.

Figure: 4.1
The Travel to Work Areas: The Cotton Region



Source: NOMIS

Figure: 4.2
The Travel-to-Work Areas: The Potteries Region



Source: NOMIS

4.2.1: The Census of Employment (ERI) Data

The data for each area was accessed via the National On-line Manpower Information System (NOMIS) held at the University of Durham and administered by the Manpower Services Commission (MSC)¹.

Prior to obtaining access some limited 1981 data for Lancashire was already to hand and analysis had already identified areas for case study during the several months that intervened between access application and clearance. This 1981 data was based upon the 1968 Standard Industrial Classification (SIC)² and, in hindsight, this imposed a minor limitation upon the subsequent extraction of full data sets for the region from NOMIS to the 1981 Census of Employment; the last to use the 1968 SIC. Choosing the latest available Census (1984) would, however, have also entailed the changes in definition to the Travel to Work Areas (also made in 1984)³ in addition to the alterations of 1980 to the SIC.⁴ In the event, it would have been more satisfying than pertinent to have incorporated these changes by using the latest available data set. Since the 1981 Census of Employment data was perfectly adequate to its brief of highlighting the continuities and contrasts of the respective historical 'regions' with their contemporary spatial counterparts, there was little justification for a wholesale discounting of work already in progress.

¹Prospective users should note they should first obtain clearance to access Census of Employment data from the Department of Employment, before registering as a NOMIS user with MSC.

²The Standard Industrial Classification (1968), London: HMSO.

³A full account of the revisions is given in the *Employment Gazette*, September, 1984; Vol 92, No.9, Department of Employment. For comparison, 1978 TTWA definitions are detailed in the July 1978 issue. For an appraisal of the old 1978 with new 1984 areas see Coombes, M.G, Green, A.E and Openshaw, S 'New Areas for Old: a comparison of the 1978 and 1984 TTWA's' in Institute of British Geographers, *Area*, 17:3, September 1985. See also Howson H (1979) 'Travel to Work Areas', *Statistical News*, 46, 6-10.

⁴Those wishing to convert 1968 SIC to correspond with 1980 SIC data should consult : Central Statistical Office: Indexes to the SIC, Revised 1980, HMSO, 1980.

4.3: Analysis of the 1981 Census of Employment Data

4.3.1: Locating the Current Dominant Activities in the Regions

The first thing to identify was the most important industrial activities today in the historical regions, which are termed in the case of Lancashire, the Cotton Region, and for Staffordshire, the Potteries Region, and subsequently those activities of greatest salience for men and women to reveal any change from the traditional gender patterns of industrial activity. What it is hoped the data will indicate here is those kinds of industries which characterise these regions today and therefore provide the local context within which gender constructions at the workplace take place in the region as a whole. These regionally important industries, however, may not hold the same kind of importance for men's or women's employment and hence for what characterises masculine or feminine work in the region today. The data cannot provide the whole story here but, broken down by sex, these regionally dominant MLH activities can point to gender concentrations in particular industries across the region and therefore offer an initial guide to hypotheses.

NOMIS data for the TTWA's corresponding with the historical regions was obtained in accordance with the following index (Table 4.2) and the individual TTWA data aggregated to provide the overall regional employment total for each MLH, together with individual totals for men and women.

Table 4.2
1981 Census of Employment

**1978 TTWA definitions corresponding with
the Cotton & Potteries Historical Region Extracted from NOMIS**

TTWA Code	Potteries Region TTWAs	TTWA Code	Cotton Region TTWAs
136	Burton on Trent	230	Accrington
144	Leek	234	Blackburn
154	Stafford	236	Bolton
155	Stoke	237	Burnley
157	Uttoxeter	238	Bury
		240	Clitheroe
		247	Nelson
		250	Ormskirk
		251	Preston
		252	Rochdale
		253	Rossendale
TOTALS		5	11

MLHs accounting for less than 5% of the total of any employment status (full or part time) are omitted from the retabulations for individual TTWAs.

Indication of gender specialisation for the two areas, i.e. those industries showing a greater concentration in the region than in Great Britain, is given by contrasting the GB totals by sex for an MLH (taken from the Census of Employment for all GB employees by industry)¹ with that for the region's dominant gender in that MLH activity. The latter dominance was found by simply aggregating all the individual Cotton or Potteries TTWAs totals for an MLH by sex (i.e. adding the NOMIS data together) and noting the numerical dominance. This exercise forms the basis for the following tabulations.

¹1984 Census of Employment: Revised Employment Estimates, Table 8 in Employment Gazette, January 1987.

Using these regional employment totals by MLH, a simple ranking of MLH totals for all employees in each region was carried out, from which the currently dominant MLH activities for each region were extracted down to the twenty-fifth ranking activity; after this the employment numbers involved fell sharply away, below the 5% level of all employed in each region. The resulting top 25 activities are contained in Table 4.3 (Cotton) and Table 4.4 (Potteries). The extent to which these characterising activities of the regions can be regarded as male or female employment domains is given by the 'ratio of dominance' (column 2) that is, the comparative strength of the gender composition in the particular MLH activity concerned. The next task was to analyse the importance each of these prime regional MLH activities (that is what we shall now refer to as the regional labour market) has for the individual sexes as a means of gauging the salience these have for constructing gender. Before doing this, Tables 4.3 and 4.4 need further comment.

TABLE 4.3
COTTON AREA : ALL SAMPLE TTWAs
Dominant Activities (MLH) : All Employment

Sex Dominant in TTWA	Ratio of Dominance	Rank	MLH DESCRIPTION	Sector
F	5:2	1	Educational Services	Services
F	7:2	2	Medical and Dental Services	Services
F	5:2	3	Other retail distribution	Services
M	13:2	4	Aerospace	Manufacturing
F	4:1	5	Other services	Services
M	13:1	6	Motor Vehicles	Manufacturing
M	3:2	7	Weaving	Manufacturing
M	8:1	8	Construction	-
F	2:1	9	Retail Distribution: Food & Drink	Services
M	2:1	10	Local Government Services	Services
M	3:2	11	Ordnance and Small Arms	Manufacturing
M	15:2	12	Other machinery	Manufacturing
M	3:1	13	Motor Repairers & garages	Service
M	7:2	14	Postal Services & Telecomms	Services
M	4:3	15	Spinning	Manufacturing
M	11:1	16	General Chemicals	Manufacturing
M	8:1	17	Paper and Board	Manufacturing
M	3:1	18	Radio and Electrical Components	Manufacturing
F	7:2	19	Public Houses	Services
M	2:1	20	Paint	Manufacturing
M	6:1	21	Rubber	Manufacturing
M	3:1	22	Wholesale Distribution: F & D	Services
F	3:2	23	Footwear	Manufacturing
M	3:1	24	Other textile industries	Manufacturing
M	9:2	25	Electrical Machinery (not vehicles)	Manufacturing

Table 4.4

POTTERIES REGION : ALL SAMPLE TTWAs
Dominant Activities (MLH) : All Employment

Sex Dominant in Potteries	Ratio of Dominance	Rank	MLH Description	Sector
M	11:10	1	Pottery	Manufacturing
F	11:5	2	Educational Services	Services
F	4:1	3	Medical and Dental Services	Services
M	11:1	4	Construction	-
M	5:1	5	Rubber	Manufacturing
M	5:1	6	Electrical Machinery	Manufacturing
F	12:5	7	Other retail distribution	Services
M	22:1	8	Coal Mining	-
M	2:1	9	Local Government Services	Services
F	11:10	10	Retail Distribution: Food & Drink	Services
F	3:1	11	Other Services	Services
M	8:5	12	Motor Repairers and Garages	Services
M	6:5	13	National Government Services	Services
M	2:1	14	Postal Services	Services
M	2:1	15	Brewing and Malting	Manufacturing
M	4:1	16	Agriculture and Horticulture	Primary
M	1:1	17	Other Wholesale Distribution	Services
M	8:1	18	Electricity Supply	Services
F	1:1	19	Clubs	Services
F	3:1	20	Public Houses	Services
F	1:1	21	Insulated Wire and Cables	Manufacturing
M	2:1	22	Electronic Computers	Manufacturing
M	9:1	23	Road Haulage Contracting	Services
M	2:1	24	Other Electrical Goods	Manufacturing
M	1:1	25	Sport and Other Recreation	Services

The striking, though unsurprising, feature of the two regions is the clear broad sectoral segregation of men and women between manufacturing and service employment. Manufacturing activities taken together are overwhelmingly male territory whilst, similarly, women clearly predominate in service activities. In each case, the atypical gender gains a toehold only at the lower end of the regional rankings.

On the face of it there do appear to be discrete gender domains along sectoral lines; men in manufacturing, women in services. Nevertheless we have already alluded to differences in the type of dominance pattern displayed by each gender in their respective sectors. In services, the gender stronghold consists in those activities which are not only the prime service activities but also rank among the most

important regional employment activities. In the case of men and manufacturing the picture is somewhat different. Here, their stronghold lies among the highest ranking manufacturing activities yet manufacturing overall is decidedly of secondary importance in the the two regions, reflecting of course the general shift towards a service-based economy. Within their own terms, so to speak, each gender holds the high sectoral (manufacturing or services) ground. At the fringes of these broad gender sectoral domains, however, there are differences between men and women in the extent to which they penetrate the domain characterised by the opposite sex. Thus, women's incursion into the predominantly masculine characterised domain of manufacturing is extremely small. There is only one manufacturing activity in each region characterised more by women than it is by men. Men, however, are found in a wide variety of service MLH activities and penetrate far deeper into this female characterised sector. This is in part explained by the clear sub-division within the range of service activities along gender lines in stark contradiction to both popular and academic wisdom. Indeed, in the Potteries, male-dominated service employment has, compared to the Cotton region, much greater salience for the region's overall employment structure, where men account for eight of the region's top 25 activities, whereas in the Cotton region men figure in half that number. The contours of this sub-division are immediately apparent from the straightforward extraction of the service activities from the two regions shown in Table 4.5, below. Look at the list:

Table 4.5

**Male Dominated Service Activities
Cotton and Potteries Regions**

Cotton		Potteries	
Rank in Region	MLH Description	Rank in Region	MLH Description
10	Local Government	9	Local Government
13	Motor Repairers	12	Motor Repairers
14	Postal Services	13	National Govt
22	Wholesale Distribution	14	Postal Services
		17	Other W/sale Distn
		18	Electricity Supply
		23	Road Haulage
		25	Sport/Otr Rec

Now compare this with the same exercise for female service activity in Table 4.6 where the gender specific features begin to emerge.

Table 4.6

**Female Dominated Service Activity
Cotton and Potteries Regions**

Cotton		Potteries	
Rank in Region	MLH Description	Rank in Region	MLH Description
1	Educational Services	2	Educational Services
2	Medical & Dental	3	Medical & Dental
3	Other retail distn.	7	Other retail distn
5	Other services	10	Retail Distn: F&D
9	Retail Distn: F & D	11	Other services
19	Public Houses	19	Clubs
		20	Public Houses

These are not simply discrete gender domains within services but also seem to represent a clear distinction in the gender *meaning* of service employment. The female list can be characterised (apart from the nebulous 'Other Services'), as work involving direct personal delivery of the service in either a selling or a caring capacity, both of which attributes are consistent with women's domestic roles. This is not something which is central to this thesis, but this apparent gender division of service activity that contradicts wider national characterisations of the sector as wholly connected with women's employment is intriguing and worth a few short and speculative comments as an aside.

In selling roles, the products themselves are heavily bound up with women's role in the domestic division of labour; provision of food and drink (in pubs and cafes) and, even in other retail distribution, when one reflects, there are broad divisions on similar grounds that seem to have to do with the nature of the product being sold, as can be noted from a casual observation of the gender distribution within a department store, which is a microcosm of the wider pattern of the gender distribution in retailing. The departmental sales assistants do seem to reflect the gender roles under the domestic division of labour or masculine and feminine attributes. Electrical or mechanical goods are rarely sold by women. Even though they are often domestic appliances designed to save their labour; these are often claimed to require technical knowledge to sell, install and repair in the home, but apparently absolutely none to operate! Few men are to be seen selling cosmetics, jewellery, perfume, or anything to do with women's clothing or children. No: men sell cars, cameras, computers, DIY goods, sports equipment, anything that is largely their province once purchased. Casting your eye down Table 4.5, however, we can also note that male-dominated service activities have a tendency to be delivered in an impersonal way, though Sport and Recreation Services, and some

aspects of garage services are not. Here, though, other factors seem to come into play which are also consistent with established notions of masculinity. Postal Services and Telecommunications, Wholesale Distribution, Road Haulage, Sport and Recreation all support notions of athleticism, strength in moving or carrying heavy objects and action and mobility; all bound up with physique of the performer of such tasks. Motor repairers and garages are dirty places and, like telecommunications, require mechanical know-how, strength. Cars, of course, have a strong affinity with mobility. Finally, in the case of electricity supply, surely only men could be associated with the source and delivery of power! All this may appear to amount to a casual analysis if not flippancy, but subjective associations of this kind, as we shall see in the later case studies, contribute toward the images which are potent in skill construction and gender roles at work for these are the ideological constructs with which real people ascribe gender.

Those later case studies focus upon manufacturing activity since the service activities outlined here are universal features of all labour markets (the female-dominated ones especially so) and are consequently unable to identify those **spatially specific** aspects of the local labour market structure that contribute to spatially distinct workforces and which, therefore, play a significant role in the local element of the social construction of gender and its articulation with the wider spatial division of labour.

4:4: Assessing the Saliency of MLH Activities for Gender Construction

Whilst Tables 4.3 and 4.4 gave the gender distribution within the overall labour market structures of the two regions, they lack any measure of the saliency of particular MLH activities for men or women. Using the numerical totals of the region's employment totals for each sex by MLH, these were ranked in descending numerical order. Column 3 in Tables 4.7 and 4.8 (Cotton) and Tables 4.9 and 4.10 (Potteries), below, show the rank for the respective sexes of individual MLH

activities; in other words the importance of particular activities to the local labour market for that sex, whilst column 5 denotes the rank that activity holds in the region's employment structure as a whole. By comparing the two we get some indication of the extent to which activities important in constructing men or women are also salient in constructing the local workforce in its entirety. Specific comments follow each table.

Table 4.7
Principal Male Employment Activities
Cotton Region

Sex Dominant in Region	Ratio	Rank for Male Emp	MLH Description	Rank in Region	Sector
M	13:2	1	Aerospace	4	Manuf.
F	5:2	2	Educational Services	1	Services
M	13:1	3	Motor Vehicles	6	Manuf.
M	8:1	4	Construction	8	Manuf.
F	7:2	5	Medical and Dental	2	Services
F	5:2	6	Other Retail Distribution	3	Services
M	15:2	7	Other Machinery	12	Manuf.
M	3:2	8	Weaving	7	Manuf.
M	2:1	9	Local Government Services	10	Services
M	3:2	10	Ordnance and Small Arms	11	Manuf.
M	3:1	11	Motor Repairers & Garages	13	Services
M	11:1	12	General Chemicals	16	Manuf.
M	7:2	13	Postal Services & Telecom	14	Services
M	8:1	14	Paper and Board	17	Manuf.
M	4:3	15	Spinning	15	Manuf.
M	3:1	16	Radio and Electrical Components	18	Manuf.
M	6:1	=17)	Rubber	21	Manuf.
F	4:1	=17)	Other Services	5	Services
F	2:1	19	Retail Distribution: Food & Drink	9	Services
M	10:1	20	Synthetic Resins	-	Manuf.

The ratios shown in column two demonstrate that where men numerically dominate within an MLH activity, these are more often than not in what might be termed 'bastion' areas of masculine work. That is, industries where they overwhelmingly dominate employment, like Motor Vehicles manufacture, above, for example, and thus industries in a large part characterised as masculine due to this insularity. A feature of the male labour market then is this strong enclave boundary. There are important exceptions in the textile industry. Weaving at a ratio of 3:2 and Spinning

at 4:3 possess relatively more fragile boundaries. Weaving, of course, was traditionally almost exclusively women's work so, despite the weaker ratio, it is very significant in that it marks the overturning of the historical sexual domination of textiles production. Ordnance and Small Arms has a similarly relatively weak ratio of 3:2 in favour of men. These last three activities were obvious targets for further empirical investigation because the gender boundaries in these industries, as indicated by the low ratio of sexual dominance, were less clear and therefore were thought likely to be reinforced by more manifest and active means, such as rigid sexual divisions within the detail division of labour, supported perhaps by more explicit justifications for the organisation of work and gender roles. Do different modes of gender differentiation exist between the overtly masculine industries and these other statistically weaker masculine ones? We could check by comparing the two, and on these grounds the case studies include two strong male enclave industries. Aerospace, the largest employer of men in the Cotton region and unequivocally sexually dominated by men at a ratio of 13:2 was a clear choice; the second was slightly more difficult.

Of the remaining choices within manufacturing, the next two MLHs of importance for male employment were respectively, 'Other Machinery' (seventh with a ratio of 15:2) and 'General Chemicals' (twelfth, at 11:1). The problem with both these is the residual character of their categorisation within the SIC. Ambiguities would undoubtedly arise in matching the MLH definition with observed establishments in the field. 'Paper and Board' plainly did not pose any such difficulty for empirical identification, and hence became the second choice.

An identical method of analysis was carried out for the female labour market in the Cotton region.

Table 4.8
Principal Female Employment Activities
Cotton Region

Sex Dominant in Region	Ratio of Rank for Dominance	Rank for Fem. Emp	MLH Description	Rank in Region	Sector
F	5:2	1	Educational Services	1	Services
F	7:2	2	Medical and Dental	2	Services
F	5:2	3	Other Retail Distn	3	Services
F	4:1	4	Other Services	5	Services
F	2:1	5	Retail Distn: F & D	9	Services
M	3:2	6	Weaving	7	Manuf.
M	3:2	7	Ordnance & Small Arms	11	Manuf.
F	3:1	8	Public Houses	19	Services
M	2:1	9	Local Government	10	Services
M	13:2	10	Aerospace	4	Manuf.
M	4:3	11	Spinning	15	Manuf.
F	3:2	12	Footwear	23	Manuf.
M	3:1	13	Motor Repairers etc	13	Services
F	6:1	14	Dresses, Lingerie etc	-	Manuf.
F	4:3	15	Printing, Publishing	-	Manuf.
M	2:1	16	Paint	20	Manuf.
F	2:1	17	Restaurants, Cafes etc	-	Services
M	6:5	18	National Government	-	Services
M	7:2	19	Postal & Telecomms	14	Services
F	3:2	20	Other Wholesale Distn	-	Services

As already noted, the kind of service employment in these regions, whilst important within the local labour market, is not, due to its more uniform significance throughout the UK, seen as capable of producing any geographic variation in gender construction for these particular study regions, though service employment can and does vary between regions. Thus the five most important categories of employment for women shown in Table 4.8, above, belong to this category. This is not to say that a service classification is necessarily sufficient to exclude consideration of spatial effects, but merely that these particular services (ranked 1 to 5 in Table 4.8) for the most part are currently characterised by aspatial processes. Indeed, we know from social trends research that there are beginning to emerge marked spatial distinctions in service activity and provision, especially in private personal services such as nannying, domestic service and other domestic support services to upwardly mobile professionals in the south of England, which are the Janus face of what has

been identified as the North-South divide. Most of these come under the heading of 'Other services' and research into the geographical distribution of activities coming under this categorisation may well reveal other dimensions to the changes in the spatial division of labour that have already been documented for socio-economic class, (see Massey, 1985). Such work would pinpoint the intersection of class and gender in spatial analysis, since a prime characteristic of the servicing phenomenon in the South is the simultaneous class/gender division between the producers and consumers of such services; the unskilled manual labour of women servicing the mainly male professional and technical socio-economic classes.

Moving down the rankings shown in Table 4.8 then, the 'captured' domain of weaving, somewhat surprisingly, remains the primary spatially specific activity for women in the Cotton region, ranking as the sixth most important activity in the female labour market as a whole (all higher-ranking activities of importance to women belong to the services activities). Despite its current dominance by men, weaving is slightly more salient to the female labour market at this sixth rank, since in the labour market for men it is seventh in importance. Its relative importance to women is patently the vestige of their former overwhelming dominance of weaving activity historically in the area. Similarly, Ordnance and Small Arms, together with Spinning (the other relatively weak enclaves identified for men) are in each case of greater importance to the female labour market in these areas than they are to the men who numerically dominate these activities. Ordnance ranks seventh for women as against tenth for men. Employment for women in spinning is significantly more important to them at eleventh rank than for the male labour market and the regional labour market structure overall where it ranks fifteenth. What appear to be weak enclaves thus may be buttressed to some degree by the fact that these activities in themselves are less central to what is seen as men's work in the region, and possibly

reinforced by distinct gender divisions within the organisation of work in these industries. If this is so, then we can hypothesize that there may be multi-dimensional referents for gender construction; some to do with the external structure of the labour market as a whole and the individual gender labour markets within it, and some connected with internal workplace organisation. In addition, it points to a multi-directional pattern of reference, with gender construction processes being influenced by combinations of the above factors and also by reference to what other women are doing and/or what men are doing at any level of the social division of labour. In other words, the processes of the social construction of gender can be the result of a composite 'reading' along several coordinates given by what we shall term the national consciousness of what it means to be masculine or feminine, or, alternatively, by the locally specific contexts within which that construction process takes place.

Aerospace, already singled out for its clear masculine enclave features, turns out to be the third most important non-service activity for women. The attraction of Aerospace for case study, however, lies more in its place in manufacturing activity in the region and for the male labour market. It is the prime activity for men in the region (see Table 4.7) as well as the primary manufacturing activity in the region (see Table 4.3). Together these activities demonstrate some overlapping of male and female areas of employment; areas in other words where the context of gender construction is provided by the organisation of work and skill definitions in the industries concerned and where the social construction processes themselves could be expected to be more visibly related to gender.

Footwear provides an example of an industry where the processes of gender construction might be expected to have less reference to external labour market

factors, and more to internal organisation. It constitutes the highest-ranking manufacturing activity dominated by women in the region overall, though it should be noted that footwear lies at the periphery of the industries characterising the regional labour market. Looking at the gendered labour market data above, it has little salience for either male or female labour markets. It was considered then that men's work and women's work in this industry were likely to take place primarily *in relation to one another* within the detail division of labour rather than by reference to the constructions given by the dominant activities for men and women in the region.

All other manufacturing activities beyond Footwear that were important to the female labour market had no importance whatsoever for the male labour market or at the regional level. These were Dresses, Lingerie and Infants' Wear, with the highest female dominance ratio of all at 6:1, a classic domain of female work ; Paint, where the ratio of men to women was 2:1, and Printing and Publishing, where women narrowly dominate at 4:3.

Thus, salient manufacturing activity for women in the region is confined to MLH activities which possess one or more of the following characteristics:

- a) the activity is dominated by men; especially the case in those activities of greatest salience to women (weaving, spinning, ordnance & small arms, and aerospace) -MLH activities which are also of greatest regional employment significance
- b) the activity has only marginal or no significance for the region's overall labour market structure (footwear, printing & publishing, paint, dresses, lingerie & infants' wear); MLH activities which, on the whole, women tend to dominate.
- c) the activity has no salience whatsoever to the region's male labour market (footwear, printing &

publishing, paint, dresses, lingerie & infants' wear).

The only manufacturing activity women dominate that is also important to regional employment as a whole, is also a weak enclave with a ratio of 3:2 in Footwear. Of the remaining two activities salient to women (Dresses, Lingerie & Infants' Wear and Printing & Publishing), their dominance does not mean very much in that these are unplaced in the regional ranking of employment totals and therefore lie at the extreme fringes of the region's employment structure, as well as being activities irrelevant to male employment in the region.

It is interesting to note that the one activity where women approach levels of dominance of a MLH of an level typically displayed by men is Dresses, Lingerie & Infants' Wear; an activity closely identified with women's domestic role. They outnumber men by a ratio of 6:1; a ratio by no means exceptional for men who often dominate an activity by ratios well in excess of this. Women's dominance of a regionally unimportant activity clearly poses no destabilisation of the established sexual division of labour within production. But more interestingly we can note that it does not contradict, but rather supports, their position within the wider sexual division of labour.

Using the same sequence of analysis adopted above for male enclaves, investigation of the female equivalents was also desirable. Whilst there was no problem of ambiguity in relating these SIC classifications to establishments (such as was encountered for the male enclaves for residual categories) the structure of both the Dresses, Lingerie & Infants' Wear and the Printing and Publishing industries raised a different problem. They are both industries which are very fragmented, dominated by small-scale enterprises difficult to pinpoint on the ground. The only female dominated manufacturing activity large enough for case study was Footwear.

Along with paint manufacture it represents the only other manufacturing activity salient among women's employment in the region, and which also contributed to the overall character of the labour market as a whole.

The cases meriting detailed empirical study that result from the foregoing analyses of the statistical tabulations are as follows:

Table 4.9
Cotton Region: Case Study Industries

MLH Activity	Key Features/Criterion for Study
Aerospace	Strong male enclave. Top employment activity in region. Salient employment for both women and men.
Weaving	Domination by men marks reversal of traditional sexual division of labour, but 'weak' enclave. Ranks as more salient to women's employment than it does for men in their respective labour market. For women it ranks as the top manufacturing activity.. Offers direct historical comparison.
Spinning	Another 'weak' enclave for men but of low importance in constructing masculinity viz other male work, yet more salient for female labour market. Offers direct historical comparison.
Ordnance & Small Arms	Yet again a weak male enclave characterised by higher ranking salience for women's employment compared with the local male labour market.
Paper and Board	'Strong' male enclave. Offers comparison with 'weak' male enclaves.
Footwear	Only regionally significant manufacturing activity dominated by women, but then only marginally.
Paint	Male dominated, but only empirically accessible manufacturing activity ranking as important to female labour market and the region.

4.4.2: The Potteries Region

Just before moving on to the corresponding exercise for the Potteries, I want to add to the discussion of the overall labour market structure of the two regions covered in Section 4.1, by taking you back to Table 4.4. Commentary there focussed upon features common to the two regional labour market structures, especially the identification of a sub-division within service activity along gender lines. There is,

of course, much more to be gleaned from comparing the two. Concentrating on Table 4.4, the striking feature of the Potteries region, in contrast to the Cotton region is the abiding relevance and importance of the traditional industry which gave rise to its popular characterisation as 'The Potteries'. The pottery industry far and away outstrips any other employment activity in the region and among non-service MLH activities in the first 20 rankings, it accounts for 36% of employment in the region with 29,456 employees. Its nearest manufacturing rival is Rubber, employing 11,388 across the region (but mostly centred on Stoke), a mere 14% of regional non-service employment and representing 38% of all those employed in pottery production. Thus, unlike the Cotton region, and perhaps uniquely among other TTWAs, a manufacturing activity heads the employment table for the area.¹ Beyond this the two regions have a broadly similar manufacturing profile. The dominant manufacturing industries are overwhelmingly masculine, the middle ground less clearly male dominated, whilst the fringes are marked by a mixture of overwhelmingly masculine, narrowly female-dominated, or activities where men may still numerically dominate but where they do so to a far lesser extent than found within core manufacturing activities.

Service activity in the two regions is distinctly different. It is more important to the labour markets as a whole in the Potteries as evidenced by its greater concentration in the middle orders of the regional employment rankings as well as being in much greater evidence among the lower orders, compared with the Cotton region (Table 4.3). Nevertheless, whilst the segregation of service activity along gender lines is marked for both regions (as noted earlier) the distribution of gendered service activity for the two is different. The two principal service activities (education and

¹Employment data scanned for other TTWAs around the GB showed a broad manufacturing/service sectoral pattern closer to that documented for the cotton region; i.e. where Educational and Medical and Dental Service employment typically dominate the local employment structure, and where manufacturing activity lies somewhere around the bottom half of the first ten dominant employment activities.

medical and dental services) in both regions are overwhelmingly female, and in this respect they are typical of the majority of local labour markets in Britain (see footnote). Despite the overall importance of service activity to the Potteries region, this is not to the benefit of women in terms of higher share of service employment than their sisters in the Cotton region nor relative to men in their own region. As the service profiles in Table 4.10, below, show, women do marginally better in service employment in the Cotton region by virtue of the inclusion of 'other services' in the top third of the employment rankings coupled with fact that in the Potteries the middle and bottom thirds of service activity are overall male-dominated.

Table 4.10
Service Employment Profiles in the Two Study Regions

Cotton Region		Potteries Region	
Activity	Gender Distn. (Ratio)	Activity	Gender Distn. (Ratio)
Education	Women (5:2)	Education	Women (11:5)
Medical & Dent.	Women (7:2)	Medical & Dent	Women (4:1)
Other Retail Dist	Women (5:2)	Other Retail Dist.	Women (12:5)
Other services	Women (4:1)		
----- (Top Third) -----			
Retail D : F & D	Women (2:1)	Local Govt	Men (2:1)
Local Govt	Men (2:1)	Retail D: F & D	Women (11:10)
Motor Repairs	Men (3:1)	Other Services	Women (3:1)
Postal Services	Men (7:2)	Motor Repairs	Men (8:5)
		National Govt	Men (6:5)
		Postal Services	Men (2:1)
----- (Middle Third) -----			
Public Houses	Women (7:2)	Other Wholesale Distn	Men (>1:1)
W/Sale Dist F&D	Men (3:1)	Electricity	Men (8:1)
		Clubs	Women (>1:1)
		Road haulage	Men (9:1)
		Sport & Recreation	Men (>1:1)

The analysis of the data so far has previewed some of the points which now follow Tables 4.11 and 4.12 for the Potteries region. This tabular information is derived in

the same manner as described for the Cotton region (Section 4.2.1) and is presented without repetition of the methodological procedures.

Table 4.11
Potteries Region: Sample TTWAs
Dominant MLH Activities for Males

Col	1	2	3	4	5	6	7
Sexual Dom	Ratio of Dominance	Rank for	more or less important than in regional empt	MLH Description	Rank for	Rank in Region	Sector
M	11:10	1	=	Pottery	2	1	Manuf.
M	1:1	2	+	Construction	-	4	-
M	5:1	3	+	Rubber	10	5	Manuf.
M	5:1	4	+	Electrical Machinery	12	6	Manuf.
M	22:1	5	+	Coal Mining	-	8	-
F	11:5	6	-	Educational Services	1	2	Service
M ¹	2:1	7	+	Local Government Services	7	9	Service
M	8:5	8	+	Motor Repairs and Garages	17	12	Service
F	4:1	9	-	Medical & Dental Services	3	3	Service
M	5:2	10	+	Postal Services	18	14	Service.
F	12:5	11	-	Other retail distribution	4	7	Service
M	5:1	12	+	Agriculture & Horticulture	-	16	-
M	8:1	13	+	Electricity Supply	-	18	Service
M ²	6:5	14	-	National Govt. Service	9	13	Service.
M	3:1	15	=	Brewing and Malting	-	15	Manuf.
M	9:1	16	+	Road Haulage & Contracting	-	23	Service.
M	7:1	17	+	Abrasives & Building Materials	-	-	Manuf.
M	8:1	18	+	Industrial Plant and Steel-work	-	-	Manuf.
M	5:1	=19	+	Bricks, Fireclay	-	-	Manuf.
F	2:1	=19	-	Retail Distribution: Food & Drink	10	10	Service

- NOTES:
1. Reversal of GB sexual division of labour where women narrowly dominate the MLH with a ratio of 3:2.
 2. Again a reversal of the national sexual division of labour and, similarly, a very minor reversal at that.

Table 4.12
Potteries Region: All sample TIWA's
Dominant MLH Activities for Females

1	2	3	4	5	6	7
Sexual Dominance	Ratio of Dominance	Rank for	more or less important than in reg empt	MLH Description	Rank in Region	Sector
F	11:5	1	+	Educational Services	2	Service
M	11:10	2	-	Pottery	1	Manuf.
F	4:1	3	=	Medical & Dental Services	3	Service
F	12:5	4	+	Other retail distribution	7	Service
F	3:1	5	+	Other services	11	Service
F	11:10	6	+	Retail Distribution: F& D	10	Service
M	2:1	7	+	Local Government Services	9	Service
F	7:1	8	+	Public Houses	20	Service
M	6:5	9	+	National Govt Services	13	Service
M	5:1	10	-	Rubber	5	Manuf.
F	3:2	11	+	Clubs	19	Service
M	5:1	12	+	Electrical Machinery	6	Manuf.
F	12:5	13	+	Restaurants, Cafés, Snack Bars	-	Service
F	11:10	15	+	Other Wholesale Distn	17	Service
F	3:2	16	+	Insulated Wire and Cable	21	Manuf.
M	8:5	17	-	Motor Repairers & Garages	12	Service
M	5:2	18	-	Postal Services	14	Service
F	5:2	19	+	Other Business Services	-	Service
F	2:1	20	+	Banking & Bill Discounting	-	Service

An obvious distinction between these two tables is once again the importance of the broad gender division of sectoral activity between manufacturing and service employment. Women dominate only one manufacturing MLH in the Potteries region, Dresses, Lingerie & Infants' Wear, and it is the only manufacturing activity with no regional importance¹. All other manufacturing MLHs are consistently of less importance to women's employment than to the region as a whole, with the exception of Insulated Wire & Cables, lying at the extreme margin of the characterising MLH activities that make up the region. However, unlike the picture for male employment the salience of pottery manufacture to women's employment has far greater significance, as second only to Educational Services. Constructions of women's work and therefore in part of the female gender, are thus expected to be still influenced by their work roles in the pottery industry.

¹That is outside the selected criterion of >5% share of regional employment.

What can be surmised from Tables 4.11 and 4.12 is that gender construction operates, as it does for the Cotton region, at several levels. Broadly it takes place along the broad sectoral line between manufacturing and services, and within services there is a reasonably distinct gender cleavage. This picture for services suggests that gender construction relies more heavily upon wider social and ideological notions of sexual roles and that it is less dependent perhaps upon the social and cultural context that derives from its industrial geography. For manufacturing too it seems there is some reference to aspatial considerations; coal mining, rubber and construction work and electrical engineering are, like anywhere else, unequivocally masculine domains. This is not to deny any 'cross-reference' of gender roles and attributes in the process of gender construction at this more national level of the social division of labour. These hypotheses form part of the set of questions to which the empirical work is addressed. Where the transition to spatially contingent gendering occurs is (as already outlined for cotton) at the point of uniqueness of the spatial division of labour, that is, at the point where features of the region's labour market emerge from the profile to distinguish it from other labour markets. Clearly the pottery industry constitutes one such hallmark. Rubber, Brewing & Malting, Electrical Machinery and Agriculture and Horticulture, Insulated Wire & Cable are others. It is in relation to these areas of activity that spatially specific gender construction processes might potentially be disentangled from more geographically generalised ones. The pottery industry with its lack of comparable industries in other regions, and the fine numerical balance between males and females working in the industry, offers the greatest mileage in this respect. Here gender construction within the industry could be expected to take place primarily in an overt and gender interrelated fashion within the technical division of labour.

Of the remaining activities, Agriculture & Horticulture was discarded from the cases as being too fragmentary for study. It will be noted that Table 4.13, below, also excludes the two manufacturing activities in which women predominate: Dresses, Lingerie & Infants' Wear and Insulated Wire & Cable. The former had to be excluded on the grounds of its fragmented structure (as it was in the cotton region) and in the case of the latter, searches of trade directories could not identify any enterprises. These were strictly practical criteria imposed by the time and financial constraints of doing research for a thesis.

The short list for more in-depth analysis and the supporting rationale is set out overleaf:

Table 4.13¹
Potteries Region: Empirical Studies

MLH Activity	Key Features/Criterion for Study
Pottery	Largest employer of labour in the region. Of prime salience to male employment and second only to the female labour market. An extremely weak male enclave; numerical dominance 11:10. Potentially rigid sexual divisions at level of technical division of labour.
Electrical Machinery	} Strong male enclaves, thus possibly very important in the construction of notions of masculinity and likely to differ in form from weak enclave in pottery.
Rubber Brewing & Malting	
Construction & Earth Moving Equipment Biscuit Manufacture	} The only two other manufacturing activities identifiable at level of an individual TTWA & therefore able to be matched to individual establishments. The former lies at the fringe of the male labour market but is strongly male oriented & therefore useful to check for variation in form of masculinity with structural position in labour market. Biscuits emerged as very important to women's employment in the Uttoxeter TTWA. It is also the only identifiable manufacturing activity for women in the region beyond pottery employment. It lies in the same TTWA as the most important regional employer in Earth Moving Equipment, and thus offers a sharp gender division within one area.

¹The corresponding information for the Cotton Region is presented as Table 4.9

4.4.3: Locating the Case Study Industries

Having targetted these MLHs for empirical study, the next stage was to discover how these were spatially distributed within the region and thus narrow the search for individual establishments. The intra-regional picture is shown in Tables 4.14 and 4.15 below, and is derived from the data for the individual TTWAs making up the region, from which the four top ranking activities in any TTWA were extracted. These rankings threw up other non-targetted MLHs submerged in the regional aggregation. The two most important of these, which were eventually included in the fieldwork, both lie in the Uttoxeter TTWA. The first is Biscuits, which provided the only sub-regional manufacturing activity dominated by women; the other was Construction & Earth-Moving Equipment, which fortuitously is strongly male-oriented. Thus, combined in one TTWA we have the extremes of gender distribution in manufacturing activity. The exercise also eliminated one regionally-targetted activity; Industrial Plant and Steelwork, though regionally significant it did not emerge in the four top ranking activities in any of the individual TTWAs making up the region and from this it is deduced that the industry is comprised of mostly small-scale establishments and therefore difficult to pinpoint. Like other industries displaying this characteristic, it was discarded on pragmatic grounds. It will additionally be noted that Tables 4.14 and 4.15 include service activities; this is because they appear within the ranking procedure criterion; i.e. they were in the top four ranking activities in the TTWA. Table 4.14 for the potteries shows a fairly discrete spatial patterning of manufacturing activity within the region and thus required no further criteria to be applied to locate the centre for an individual activity. The only overlaps, looking down the columns, occur in service activity.

Table 4.14

**Top Ranking MLHs for Individual TTWAs
Potteries Region**

MLH	Rank in all empt	1	2	3	4
Education		Burton	Uttoxeter	Stafford Leek Stoke	-
Brewing and Malting		Burton	-	-	-
Rubber		-	Burton	-	-
Construction & Earth-moving Equipment		-	-	-	Uttoxeter
Medical & Dental		Leek	-	Burton Stafford	Stoke
Textile Finishing		-	-	Leek	-
Local Govt		-	-	-	Leek Stafford
Electrical M/cy		Stafford	-	-	-
Pottery		Stoke	-	-	-
Biscuits		-	Uttoxeter	-	-
Coal		-	-	Stoke	-
Agric & Hortic.		-	-	Uttoxeter	-

The corresponding picture for the Cotton region in Table 4.15 below, is more complex by virtue of the greater number of TTWAs making up the fit with the

historical region and the greater diversity of industrial activity within them. The choice of locations for study here did require the introduction of further criteria in the case of some activities which appeared in the top four rankings across several TTWAs.

Table 4.15
Top Ranking MLHs for Individual TTWAs within the Cotton Region

MLH	Rank in all Empt TTWA	1	2	3	4
Education		Accrington Bolton	Nelson (N) Preston(P) Rawtenstall Bury	Burnley (B) Clitheroe	-
Paint		Blackburn(D)	-	-	-
Printing & Publ.		-	Accrington	-	-
Otr Retail Distn		Burnley (P)	Bolton	Accrington Nelson (N) Rochdale Preston (L)	Burnley(B)
Retail Distn		-	-	-	Preston (L)
Construction		-	-	-	Accrington Preston (BB)
Spinning		-	Blackburn(D)	-	-
Weaving		Nelson (N) Nelson (C)	Preston (C)	-	-
Paper & Board		-	-	Blackburn(D)	-
Synthetic Resins		-	-	-	Blackburn(D) Burnley (P)
Rubber		-	Preston (L)	-	-
Aerospace		Burnley (B) Preston (BB)	Nelson (C) Bolton	Preston (P)	-
Medical & Dental		Clitheroe Preston (P) Bury	Burnley (B) Rochdale	Rawtenstall	Bolton

Radio Manuf.	-	Burnley (P)	-	-
Glass	-	-	Burnley (P)	-
Furniture & Upholstery	-	-	-	Nelson (N)
Public Houses	-	-	-	Preston (C)
Other Services	-	Clitheroe	-	Preston (P)
Cement	-	-	-	Clitheroe
Motor Vehicles	Preston (L)	-	-	-
Other Mech. Eng.	-	-	Nelson(C)	-
Other Textile Inds	-	-	-	Rochdale
Footwear	Rawtenstall	-	-	-
Electrical Machinery	-	-	-	Rawtenstall
Other machinery	-	-	Bury	-
Telegraphic & Telephone Equipt.	-	-	Preston (C)	-
W/Sale Dist F & D	-	Preston (BB)	-	-
Iron & Steel	-	-	Preston (BB)	-
Motor Repairers & Garages	-	-	-	Preston (L)
Ordinance & Small Arms	-	Preston (C)	Blackburn (B)	-
KEY:	NELSON(C) = Colne NELSON(N) = Nelson BURNLEY (B) = Burnley BURNLEY (P) = Padiham BLACKBURN (B) = Blackburn BLACKBURN (D) = Darwen			
	PRESTON (P) = Preston PRESTON (C) = Chorley PRESTON (BB) = Bamber Bridge PRESTON (L) = Leyland			

Out of the above two tables the places for studying some of our chosen industries selected themselves by virtue of being the only places where the industry ranked among the top four in the TTWA. In the Potteries all the cases chosen for study selected themselves in this way. These were (taking Table 4.14 first) Brewing in

Burton, Earth-Moving Equipment and Biscuits in Uttoxeter, Electrical Machinery in Stafford and Pottery in Stoke.

In the Cotton Region (Table 4.15) some case industries were ranked as important in more than one TTWA; others were self-selecting. Thus Paint and Paper and Board in Darwen, and Footwear in Rawtenstall,¹ selected themselves. For the rest of the cases, the rankings threw up a choice of places for study. These were first narrowed down to places where they held highest rank, which, for example, narrowed Weaving down to the Nelson TTWA - either in Nelson itself or in Colne. The final choice of the study location was based on the simple practical consideration of restricting as far as possible the geographical area to be covered. Thus, for example, Colne Weaving and Burnley Aerospace are the most proximate. Ordnance and Small Arms, at Blackburn (Darwen) was similarly close to the Burnley case study and so on.

The case of spinning in Bolton is the only case study chosen which does not conform to this method. Whilst it does not appear in the top four ranking MLHs in Bolton, the actual numerical employment in Spinning was much higher than in Blackburn (Darwen). Bolton spinning activity thus represents the core of the spinning industry today in the region despite being submerged below the many other activities that are now more important to the Bolton TTWAs employment structure. The choice of Bolton was also attractive because the town itself was one of the major spinning towns of the nineteenth century spinning industry.

¹The Rawtenstall manufacturer's head office and a further plant were located in Burnley and this is where the case study takes place.

4.5: Identifying Individual Establishments for Research

Individual establishments for each of the activities shown in Tables 4.9 and 4.13 above were identified by reference to the general trade directories (Kompass and Kelly's) and specialist directories (Worrall's).¹

There are, however, potential pitfalls here, but none that cannot be compensated for by careful cross-checking. The trade directories have their own classifications for business activities which may neither correspond with the SIC nor permit cross-reference with another directory's nomenclature. Nevertheless, a combination of checks and cross-checks eliminates the problem. Firstly, comparison of the very comprehensive descriptions for individual MLHs published by the Central Statistical Office (1968) with the directory's own nomenclature often clears up any ambiguity, though some broad definitions, such as "Metal Products" may still defy attempts at matching with the SIC MLH headings, but several other sources capable of clarifying this information are readily available. The Economic Intelligence Units of local authorities, local Chambers of Commerce and not least the companies themselves were subsequently used to achieve a description of products and processes sufficient to eliminate spurious classifications.

It was possible (and essential) at the same time to cross-check the company information supplied in the directory listings. This is especially important for multi-plant companies which may be listed solely by the town location of their headquarters. The reverse could also be the case so that firms operating in an area with headquarters elsewhere would not appear in the directory listed by the town where they in fact operate. To check whether those industries I was unable to locate in the directory were in fact operating in the area, a call was made to one of two

¹The full references appear in the references section.

sources: the local authority's Economic Intelligence Unit or the local Chamber of Commerce. Thus employment totals for an entire group of sites may appear to be the employment count for the individual town hosting the head office, and in these cases telephone enquiry was made to the company to check their geographical and functional distribution of activities, as well as employment levels across their various sites.

There is one other principal difficulty in using trade directories in conjunction with TTWA data which is also related to their classificatory schemes. All the directories employ a straightforward geographical listing procedure based upon companies' postal addresses. The semi-rural locations can be difficult to identify with the TTWA boundaries since their principal local postal sorting office may lie outside the TTWA in which they are sited. For example, companies in Barnoldswick are correctly addressed 'Barnoldswick, Colne' and hence directory listed as 'Colne', yet under the 1978 TTWA definitions, there are separate TTWA boundaries for both Barnoldswick *and* Colne. It is essential in such cases to run a check against the TTWA boundary definitions provided by the Department of Employment¹ though County Planning Departments can just as easily confirm the boundary within which a particular company resides. This matching is important, for mismatches can impair the analysis. In this case it excluded the major aerospace concern, Rolls Royce, which manufactures blades for the RB211 at Barnoldswick, but which turned out to be inside the Barnoldswick TTWA, and therefore just outside our regional definition. This is a rather good illustration of the inconsistencies in the 1978 TTWA boundaries bemoaned by geographers, and one that underwent revision in 1984, in which the 'Barnoldswick and Nelson & Colne' TTWAs were amalgamated and renamed 'Pendle'.

¹DoE Employment Gazette (1984) 92:9.

4.6: Setting up the Interviews & the Mechanics of Fieldwork

Getting access to my chosen study firms was outstandingly successful. Out of all those chosen in the two study regions only one firm declined to be interviewed. Of the remainder, the first firm approached offered a visit.¹ However, I feel I can claim a 100% access rate. Only the Rubber industry refused to be interviewed on the grounds that the process of tyre-making is an industrial secret. The rubber company approached indicated I would meet with the same response throughout the industry. As I mention later, however, it turned out that another interviewee in the Potteries region was familiar with the Rubber industry and drew comparisons between it and his own workforce in Earth-Moving Equipment.

Similarly, interview visits themselves were without exception enormously successful. People were incredibly generous with their time, and the formal interview around a semi-structured schedule² usually lasted at least two hours. These were tape recorded. The interview schedule was used as a 'settling in' exercise. Once into their stride, a few prompts on my part when going through the labour process was sufficient to elicit much greater detail of the sexual division of labour and the justifications for it. It was often the case, however, that the most interesting and revealing pieces of information were offered after the tape stopped rolling, during a tour of production or on the way back to reception. In many cases these (often very detailed and painstaking) tours lasted on average another two to three hours. During these tours I occasionally had the opportunity to chat with workers themselves, and it would have been desirable to have given a more balanced presentation by including more material from workers and trade unionists. After all, many of the divisions I'm interested in explaining arose through the

¹A copy of the letter of approach to the case study industries appears as Appendix III

²Attached as Appendix I.

impetus of trade unions. Even so, the prime focus here is not who instituted these divisions, but the current rationales given for the division of labour between genders. The employers, in this respect, are probably the best source and, of course, over such a breadth of industries they provided the one constant kind of informant that was also easily accessible. Whenever and wherever possible, however, their accounts were cross-checked with workers themselves or by simply asking the management interviewee what workers' answers might be. Cross-checks with workers rarely conflicted with management's own assessment of the workers' rationales which, incidentally, indicates that managers are perhaps better attuned to the postures workers adopt than they are often given credit for.

The interviewees¹, it has to be mentioned, were extremely frank and open in their discussions, often offering extremely sensitive information, such as plans for redundancy, relocation or details of research projects, which would have been of great value to competitors and workers. They were painstaking in their explanation of processes and eager to supply all kinds of supporting material. In nearly all cases I was invited to re-visit or check queries by telephone later, which I often did.

Overall, a good deal of time was spent during the fieldwork trips getting a feel for the area. This was all part of the process of doing the thesis and was an essential part of understanding the case studies in their local context. As the fieldwork progressed, this paid dividends when it became clear that the overall ambience of capital-labour relations in the two regions were very different and this fed back into what I saw at a more detailed level.

¹A list of interviewees names and titles for each industry studied appears as Appendix II.

In the following chapters documenting the historical development of gender relations set against the contemporary case studies, we begin to explore the empirical questions just raised. Are there indeed, as suggested above, different modes of gender differentiation over time and space, and, how far are these constructions influenced by place-specific contexts? If modes of differentiation do vary historically and spatially, why is it that out of a myriad of unique and locally conditioned circumstances that the social value of gender attributes is so uniform in outcome? Just why is it that masculine attributes persistently have claim to superiority? The fullest treatment of these questions has to be deferred until the final chapter when all the material for the analysis of temporal and spatial continuity and change within and between the two study regions has been assembled in the next two chapters.

Chapter 5

The Potteries Historical Region and Contemporary Case Studies

5.1: The Nineteenth Century Pottery Industry

The Potteries is the only region in England defined by its industrial product specialism. Laid down during industrialisation, that definition still applies unchanged to the North Staffordshire area today. The industry was and continues to be extremely spatially concentrated within the few square miles covered by the former "Six Towns" chain of Burslem, Fenton, Hanley, Longton, Stoke and Tunstall, which in the early nineteenth century extended around 'five miles north west and five miles south east of Newcastle-under-Lyme ... at varying breadths from three to five miles' (Simeon Shaw, 1829:1) and which today we know as Stoke-on-Trent.

During the nineteenth century the industry progressed to a position of national and regional importance. By 1901 it accounted for 90% of British pottery manufacture, employing '46,000 workers, of whom 21,000 were women, making it the sixth largest employer of female labour in Britain' (Whipp, 1985a:115). But the industry goes back to Roman times, and continued on a small scale and predominantly cottage industry or workshop basis right up to expansion in factories at the end of the eighteenth and beginning of the nineteenth century. It is with this emergence of the factory system that detailed evidence of the division of labour becomes available for the first time.

The reliability of the accounts for the domestic phase of pottery manufacture are questionable. Simeon Shaw's own history, published in 1829, can be treated as a primary source for the nineteenth century, but Shaw himself relies upon the earlier 1686 *Natural History of Staffordshire*, written by Dr Plot, to describe in very general terms the form and extent of the domestic phase of pottery manufacture. Whilst a more detailed picture of the size and number of establishments can be pieced together from lease and rent records and probate inventories, (as Weatherill (1971) has done for the period 1660-1760), this knowledge of production sites and their means of production reveals nothing about the domestic division of labour and social relations of production among family members prior to the emergence of the factory system. Other researchers should carefully note the sources of historical accounts, for it seems to be a fairly widespread practice for descriptions of the earliest stages of pottery manufacturing to be ultimately traceable to these two sources, and the later of these by Simeon Shaw relies on the 1686 Dr Plot account for his historical source. The secondary nature of Shaw's domestic phase account is often overlooked and tends to be treated as a primary source.

5.2 The social division of labour within the pottery industry:

Richard Whipp, using the Trade Directories around the turn of the century¹ suggests that, at this time, the North Staffordshire industry had developed into six main branches:

¹ Kelly's Trade Directory of Staffordshire 1892 and 1900 and The Potteries, Newcastle and District Directory, Hanley, 1907. (cited in Whipp; 1985a:145)

"Earthenware was by far the largest with firms throughout the Potteries. By contrast, the china branch was centred on Longton and was almost a self-contained industry". (1985a:115)

Smaller divisions were Jet and Rockingham ware with twenty firms, and an even smaller number produced electrical fittings and china furniture, whilst the tile manufacturers represented one-eighth of all pottery firms (ibid). As Whipp points out, even at this level of categorisation the pattern of the industry is complicated by the fact that some firms engaged in more than one branch. Still further complexity is introduced within branches which 'subdivided according to the market and product type component firms catered for' (Whipp, 1985a:116) as well as by the diversity of firm size found in any one branch; the china trade, for instance, included 'Copelands and Wedgwood who produced porcelain for international markets, as well as the 'penny jack' shops in the back streets of Longton which survived on work sub-contracted from larger firms' (ibid).

5.3 The labour process and the division of labour

The organization of labour within a large potbank from the late eighteenth century is no less complex than that of the industry's overall structure just described. Since different branches of the industry have a similar pattern of stages in production, with the exception of tile manufacture, the account for the large manufacturing concerns given here is broadly applicable. Beyond this, comparison between firms of different size (in terms of production

scale and product range) at a very detailed level of the division of labour is unlikely to be generalisable. In addition to size, as we have defined it, which bears on the 'length' of the stages of production within firms, variation in product types between firms removes some operations and processes from the sequence of production altogether; if, for example, hollow-ware pressing of jugs and tureens were not included in a product range. Similarly, smaller firms may have substituted clay preparation processes with bought in 'bodies'.

5.3.1 The stages of production:

PREPARATION:

There was one very major distinction in the potbank between the 'clay end' and the 'decoration end'. First the Clay Department. Clay was prepared by the pug-milling of clay and grinding and milling of flints to form bodies. Slips were mixed and an initial wedging of the clay was carried out, in readiness for the potting stage. The entire preparation stage was dirty work and wedging particularly arduous. Prior to the introduction of the pug-mill around the mid nineteenth century, through which clay was finally 'pressed' to remove air bubbles, and extruded in a square-shaped 'sausage' of putty consistency (Ginswick, 1983:115) women and boys had performed this work by hand wedging. This involved 'raising, dropping, and pounding about three-quarters of a hundredweight of clay at a time (Sarsby, 1985:84). This extremely strenuous work, entailed very heavy weight-lifting. A second wedging was frequently performed in the 'spare' moments of what was undoubtedly one of the most arduous of physical labours in the entire industry: mould-running. Charles Shaw¹, who began work at the age of 7

¹Not to be confused with Simeon Shaw, cited earlier.

as a mould-runner to an apprentice 'muffin-maker' in 1839 supplies a graphic account of wedging as 'rest from the mould running' (1903:147).

Milling, which preceded pug-milling, consisted of two distinct processes. First the grinding of flints to a powder and, secondly, the pulping of the clays, to which the flint powder was later added to give a 'body'. Both operations were frequently overseen by the same miller and were carried out by similar mechanical 'mills' driven by steam, except that more durable 'paddle wheels' were required for grinding flints. The 'mills' can be likened to oversized kitchen food processors; a contemporary likened the pug-mill to a gigantic coffee mill. Clay was then fed into the top of an inverted conical cylinder containing giant revolving screws that crushed and squeezed the clay down and out to emerge in a long putty-like tube. (Ginswick, 1983:115).

Preparation processes were important for two reasons. Careful composition of the clay bodies and slips was crucial to later stages. The ease with which subsequent forming could be achieved, as well as the durability of pots during firing, depended on this initial stage. Secondly, the precise formulae for different classes of ware, which 'had to be meticulously adhered to' (ibid) formed an element in the range of techniques that contributed to uniqueness in style, quality or finish, and therefore in the firm's competitive edge over rivals. As such, slip and body composition had their secrets. A more pressing concern of the head slipman was likely to have been the sanction he might receive from his fellows in the potting department who were on piecework and keen to maintain their individual productivity and piece output. Performance of the clay during handling or under firing

depended upon the slipman's abilities. Productivity depended upon the ease and therefore speed of working clay of the right quality and the minimisation of pieces lost as a result of not surviving 'good from oven' (Whipp, 1985a:122).

POTTING:

Hundredweight slabs cut from the pug-mill and bodies underwent further manipulation according to the forming process it was intended for during this central stage in production. The main sub-divisions of the Potting Department are described in turn below.

Flat Pressing:

Mould-runners 'sometimes assisted by the plate-maker' wedged clay yet again before rolling the 'battings' which were placed on flat-ware moulds, for making dishes or plates. The correspondent to the contemporary *Morning Chronicle* describes it thus:

"Two men and a boy frequently work at the dish-making machine. The boy kneads and mashes the clay, the first workman rolls it out ... and ... his comrade ... places it upon a mould, which forms the inside of the dish". (Ginswick, 1983:117)

The mould was placed on a spindle which the flat-presser turned as he smoothed the clay over the mould with 'jerks of the wrist' (ibid), though boys were sometimes employed to provide motive power to turn the spindle (Samuel, 1977:30)

Throwing:

In the separate throwing workshop the clay was formed into appropriate-sized balls by women attendants and handed to the thrower for the formation of cups and pots. Of all the forming processes, the outcome depended totally on the physical manipulation of the thrower's hand to create the shape. Charles Shaw, who worked on the potbank during the 1840s describes the throwers shaping the ware with "exquisitely fine touches of ... thumb ... finger ... and palm" (1903:46). The 'baller' and turner, who turned the wheel, were employed by him. Contemporary prints (reproduced in Ginswick and Sarsby, op.cit.) depict a simple upright wheel driving a pulley attached to the spindle of the potter's wheel, powered by a woman or girl. Texts agree that 'ballers' were also female. After drying to a hardened state (known as 'green') the formed pot passed to the turning workshop.

Turning:

Aided by women and boys to fetch and carry pots and 'tread' the lathe, the turner, just as in wood-turning, scooped out the foot rim of articles, applied grooves or mouldings and gave the thrown pot a smoothened surface. As in throwing, the article was placed on a 'vertical revolving surface' and fashioned by chisels and other forming tools. Treading was performed by women or girls and required considerable physical exertion. Supporting the body weight on one foot, the potter's wheel was turned by the other kicking a treadle. Dr. Arlidge in evidence to the 1910 Parliamentary Report on *Lead in the Potteries* described the work in 1878 as 'perpetual jumping on one foot'. (Ginswick, 1983:117 and Samuel, 1977:34). Handles, spouts, knobs or small pressed decorative mouldings were applied. Handles seem to have been formed by one of two methods; by hand-rolling a 'sausage' of wedged clay, simply cut and hand-pressed into a mould (Ginswick,

1983:117) or, as Charles Shaw describes, aided by a smaller version of the pug-mill to form a 'sausage' (1903:46ff). Spouts were 'cast in two pieces, joined and stuck on' according to the *Morning Chronicle* survey (cited in Ginswick, 1983). Finally, women and boys performed the most menial of work making stilts.¹

Hollow-ware pressing:

The final sub-division within the potting stage was hollow-ware pressing. The method extended the range of shapes throwing or flat-pressing were able to produce, and enabled embossed effects, such as leaf or flower patterns to be achieved. Two methods were used: firstly, 'battings' (a clay 'pancake') were pressed into two halves of a mould, as for flatware, and subsequently joined together. (Whipp, 1985a:123). Alternatively, hollow-ware was cast by pouring liquid slip into a plaster mould. The mould absorbed the water leaving behind an initial clay layer adhering to the mould. Excess slip was poured out and a thicker slip successively introduced until the required thickness was achieved, and the mould was then left to dry until the pot shrank sufficiently for easy removal. (Weatherill, 1971:35). 'Teapots in the shape of houses, milk jugs in the shape of cows' were among the more ornamental items produced by casting, but more commonly it was tureens or sauce-boats (Weatherill, 1971:35-36). The hollow-ware presser had several assistants, all women or boys; the latter typically mould-runners. In common with all the other male craftsmen in potting, he employed attendants on an internal sub-contract basis (Whipp, 1985a:123) although Dupree (1981:131) suggests this form

¹ Triangles of pottery placed between pots during firing to prevent damage resulting from contact.

of employment was restricted to child labour, women being directly employed by the factory master. The pattern of these two forms of employment certainly varies across the stages of production and between sub-divisions of the major departments corresponding to these stages. This is only one feature of many which serves to demarcate the potbank workforce and these receive fuller treatment later.

FIRING:

Firing contained five main sub-divisions: the biscuit oven, dipping house, the ware cleaning and saggar-making workshops and the 'glost' oven. Once formed, all pots underwent an initial firing to a 'biscuit' state¹, but subsequently followed divergent courses depending on the class of ware. Plain undecorated wares passed directly to the Dipping House for glazing followed by a second and final 'glost' firing. Finer classes of ware divided into printed or decorated ware. The latter were also dipped and glost-fired prior to decoration in the finishing department but received a third 'enamel firing' to set the decoration in the glaze (Ginswick, 1983:118-120). Pots for printing passed out of the firing department in a biscuit state to the finishing department's print shop, had transfers applied, and were subsequently dipped and glost fired. The ovens, of which there might be several in operation at various stages of firing, were attended by a principal fireman who employed one or two male assistants. However, several assistants were needed to set and draw the furnaces and place the saggars² ready for firing. Saggar 'placers' were exclusively men on the grounds that

¹ As the term suggests, pots were transformed to a dry, brittle but rough and unglazed state.

² Saggars, (reputedly a corruption of 'safeguards') are earthenware tubs. Pots are placed inside for protection, then sealed and stacked within the furnace.

the great weight of loaded saggars, that were manually stacked inside the kiln, required strength.

Biscuit firing would take from 48 to 50 hours, the number of assistants peaking at the start and end of firing, and with only a 'caretaking' stoker to feed the furnace the first night, and the fireman and his assistant the second (Ginswick, 1983:118). Apart from these internally sub-contracted attendants, it appears the other male (and sometimes female, according to Whipp, 1985:124) assistants 'floated' between ovens, attending those at peak activity stages. Along with the firemen and their direct employees, these groups were continually on hand during firing, sleeping in any convenient corner and supervised overall by the head fireman (Whipp, 1985a:124). Male sagger-makers operated in a separate workshop within the firing department, employing one boy assistant (ibid).

The Dipping House was yet another separate workshop within the Firing Department. The dippers' work was notorious for its dangerous exposure to lead glazes from which the risks of poisoning and certain ill health seem to have been accepted as an integral part of the job. Dippers were both male and female and sub-employed assistants 'to 'put up' and 'take off' the ware and 'lawn' or filter the glaze with muslin cloth' (Whipp, 1985a:124 and Sarsby, 1985:80). The two boy assistants each respectively tossed (put up) the pots to the dipper for immersion in the glaze tub, and caught them from the dipper (taking off) for stacking prior to 'glost' firing. (Ginswick, 1983:118). The *Morning Chronicle* in 1850 described dipping work thus: "The right hand and arm are plunged nearly up to the elbow as he [the dipper] passes the piece of ware through the liquid. Then with a rapid

circular movement of the hand - a movement that only years of practice can teach ... he makes the glaze flow thin and even over the surface and shakes off what is superfluous." (24 January, 1850). Women and children were casually employed in yet another separate workshop within the firing department to 'clean and finish the ware after each firing' as well as 'clean and sort the protective stilts and spurs' (Whipp, 1985a:124). Women also seem to have been employed by dippers as assistants according to Sarsby (1985).

As in throwing, the quality of the finished item depended directly on the body movements and hand manipulation of the dipper:

"The right hand and arm...are plunged nearly up to the elbow as he passes the piece of ware through the liquid...Then with a rapid circular movement of the hand... a movement that only years of practice can teach...he makes the glaze flow thin and even over the surface, and shakes off what is superfluous". (Samuel, 1977:34).

Whilst some protective measures such as aprons and face masks were encouraged in some potbanks, there was precious little other provision.

These processes complete the description of the 'clay end' of the potbank.

FINISHING:

The two principal sub-divisions were the decorating workshops and the Print Shop. Within the former there were many sub-divisions; the detailed divisions follow after the print shop.

The Print Shop:

A male printer ran off tissue transfers from an engraved copper-plate press, which his two sub-employed women transferrers applied to the biscuit ware. These women in turn jointly sub-employed their own 'cutter'; a young girl who trimmed the transfer to a size suitable for application, (Ginswick, 1983:120; Shaw, 1829:213 and Whipp, 1985a:124). There were several sets of work groups of this structure occupied in the Print Shop. (Ginswick, *ibid*). They worked on piece-rates, the women receiving (between them it seems from the following quote) only some 14% of the printer's wage, out of which they paid the girl cutter:

"The articles printed are usually paid for at a rate of 6d. a dozen. Of this, the copper plate printers have 5¹/₄d. and the transferring girls ³/₄d. The little girl who cuts earns about 2s. per week".(Ginswick, 1983:121)

The transferrers were the only women in the finishing department to be internally sub-contracted and the only women in the potbank who were simultaneously sub-contracted and in turn sub-employed their own assistant.

Once printed, pots were then passed back to the firing department for dipping in glaze, cleaning and their second and last 'glost' firing.

Decorating:

Pots for painting, gilding, burnishing or enamelling were received in their glazed and glost fired state, decoration was applied and sent for a third 'enamel firing'. As previously mentioned, there were many sub-divisions of decoration divided into separate workshops broadly in line with each method of decoration. The Painting workshop was, along with scouring,

an all female workshop, though not exclusively a female occupation for men combined painting with gilding work. (Shaw, 1903:83). Gilding work too was apparently not exclusively male work. Listing sex-typed occupations, Dupree includes gilding as women's work, but the burden of other evidence suggests this was unlikely and Dupree unfortunately supplies no source to support their inclusion in her list (1981:145). The contemporary sources make mention of male gilders only: the two Shaws, Simeon (1829:222) and Charles (1903) both speak of these men as 'artists'. The latter placed them on a level with modellers, who were undoubtedly among the highest skilled and certainly they had a gentlemanly appearance - as Charles Shaw recounts, they were:

"as well dressed as 'the master' himself ... It was common for ... painters and gilders, as well as these modellers, to go to work in tall hats and swallow-tailed coats". (1903:83)

The *Morning Chronicle* survey, reprinted in Ginswick, does not unfortunately specify the sex of gilders. Although on a par with modelling and therefore skilled work, it was a skill painstakingly acquired compared with the 'natural genius and talent of the artists engaged in modelling, sculpting and enamelling' (Ginswick, 1983:120 and 122; S Shaw, 1829:223 and C Shaw, *ibid*). This highly skilled status alone makes it improbable that women did this work. The fact that gilding was combined with painting by men is not contradictory since painting work was stratified into simple painting and 'colouring in' or simple 'line work', and the more skillful free-hand landscape painting. It is reasonable to assume men and 'ladies' (painters, distinct from paintresses) performed the latter. Further, the painting workshop was all -female and this sexual spatial segregation from other workshops is yet another divisive feature shaping both the

demarcation between workshops and the gendering of occupations. This sexual-spatial segregation, as we shall see later, is a prime demarcator between men's and women's work in the potbank. It also serves to distinguish skill levels between male and female painters, as well as between different notions of femininity, right across the potbank (lady painters from paintresses in the main workshop, for instance).

Burnishers, who were 'mostly young women', and who polished the gold gild work, occupied the same workshop used for painting (Ginswick, 1983:120 and Sarsby, 1985:75). This is almost certainly reference to the all-female painting workshop for they are recorded as earning the equivalent of female painters by Ginswick (ibid). This comparability of earnings further suggests that the all-female painting workshop was assigned the lower skilled painting work compared with their occupational counterparts (lady painters and gentlemen gilders and painters) who worked together elsewhere.

Enamelling, as we have mentioned, was considered skilled work, yet women too appear to have performed this work though, as Simeon Shaw (1829) suggests, these were socially superior and, therefore, presumably outside the range and purview of social outrage:

"...the improvements in...Blue Painting on salt glaze and a desire to produce enamelled on the the Cream Colour [brought about] artists then in the district [to acquire] additional skill; and many young women of good families, were taught the Art; which is now an important branch of the manufacture". (1829:210)

Despite being 'ladies', or 'women of good families', their skill status appears to be marginalised in relation to the male enamellers, once again by means of spatial segregation, since the same author refers to enamelling, engraving and printing as a composite job for men which appears to have been carried out in the Print Shop (ibid:192). Engravers, who etched the copper printing plates were undoubtedly regarded as highly skilled; engravers are often mentioned by name by Simeon Shaw and he describes their work in the most eulogistic fashion. So specialist was the work of printing onto already glazed pots that, as Shaw records, Wedgwood hired a wagon fortnightly to transport a load of his cream colour to Liverpool for printing from the plates of a Mr Carver working for the firm of Sadler and Green. Another Liverpool engraver, however, was brought in by another firm to produce master copper plates for their Print Shop (1829:192 and 214). Internally, it seems likely that the composite male engraver/printer/enameller did perform his work within the confines of the Print Shop.

Female enamellers possibly worked in a separate workshop, though nowhere are they recorded as an all-female department, suggesting they may have worked alongside the paintresses. This is even more probable given that they were regarded as 'ladies' and therefore unlikely to have worked alongside men; a feature which serves to sully other women workers in the potbank. For instance, female transferrers working under the male printer were held to be vulgar by virtue of the simple fact that they worked with men. The spatial segregation of female from male enamellers and their probable membership of an all-female department serves both to place them lower in the skill or task hierarchy of enamelling as well as in relation to

other skilled men, and higher in the status hierarchy of women workers in the potbank.

Scouring:

Along with painting we are told this was also an all-female department. The fact that no contemporary prints were produced of the nineteenth century process supports the view of other sources that this work was unimportant and therefore unskilled work (Sarsby, 1985:77). This final sub-division of the work of the finishing department consisted of work to remove flint particles and other blemishes on the glazed ware after firing: 'a thoroughly unhealthy job, but attendant on no-one' (ibid). Their apparent independence was seemingly irrelevant. The prime feature of this work allowing it to be constructed as women's work appears to be its obvious low skill and hazardous working environment.

WAREHOUSING AND PACKING:

Though warehouse space could be considerable, the numbers employed in this last major division of the production sequence do not appear to have been large. All sources make only scant reference the department's internal organization. Even so, it is possible to piece together a skeletal pattern.

Packing and cooping appears to have been exclusively male work, assisted by boys. Sorting of the ware in preparation for packing or storage, however, was done by both sexes but interestingly each was assisted by child labour of the same sex. A final polishing, or 'towing' was exclusively women's work. (Whipp, 1979 and 1985a). On the whole, warehouse work was clean work and thus considered superior to say the 'clay end' which,

for various reasons such as dust or wet slimey clay, was very messy. This distinction should not be under-estimated; it was one commonly invoked in my own early working experience to demarcate between industries and therefore the status of the respective groups of workers employed in them. Working as a shop assistant, though poorly paid in comparison with 'going to work in the mill' (woollen textiles) was infinitely preferable to the dirty and noisy 'shed' according to my maternal grandparents, both of whom spent their early lives as weavers at the turn of the twentieth century.

Other occupations:

Workers involved in operations supporting these five major departments corresponding to the major stages of production fall at two extremes: designers, modellers and sculptors, (and supervisory overlookers in small potbanks) were unquestionably an elite, whilst support functions such as paint and colour preparation for painters and enamellers were carried out by child apprentices or adult women, as was stilt-making. (see Ginswick: 121). These last mostly operated within the main departments we have discussed, but the 'artists' appear to have been closeted away and treated as delicately as the china objects they produced. Their elevated status is confirmed by Wedgwood's own papers in which he bemoans the 'prima donna-like' antics of the foreign artists he commissioned, and whom he had little success in mollifying; though Josiah was a stickler for exacting hard work and perfection in line with his own example. (McKendrick, 1961:36)

5.3.2: Men's work, women's work on the potbank

In detailing the broad division of labour and its sub-divisions (see Figures 5.2 to 5.7, below) we have touched upon various features of the labour process which inform these divisions and shape the sexual division of labour. The sexual division of labour emerges from the application of sets of attributes drawn from inherent or ascribed notions about characteristics of the work itself or else notions about the gender attributes of those performing the work. These attributes combine to form a complex constellation of categories and ascriptions to define occupations as women's or men's work. The potbank's sexual division of labour represents a universe of these constellations. These constellations do not simply distinguish between men and women on the potbank, however; they also serve to distinguish between the women themselves. There are two distinct kinds of female gender discernible: whether women worked with other men, were involved with clean or dirty processes or performed skilled work relative to other women combined to determine whether women were 'ladies' or coarse and vulgar; not real women at all but interlopers in masculine space.

Men on the potbank did do heavy work, but this does not appear to have any significant salience in constructing masculinity where men were *in fact* performing objectively strenuous or heavy work, such as the stacking of loaded saggars inside the kiln, or in clay milling where the loading of mills with flint and clay would clearly have entailed lifting heavy weights. Surprisingly, heavy aspects of work seem to have their greatest salience in categorising the men painters and gilders, who painted heavier objects such as tureens whilst women worked on lighter plates and cups; a factor which perhaps indicates that in reality there was little to separate them in terms of

skill. Where women performed arduous and heavy work at the 'clay end' wedging clay, or providing motive power for the male craftsmen, this is ideologically invisible. Heaviness possesses no salience whatsoever in defining their work as women's work. Clearly if the ideological justification coincided with the objective reality of women wedger's work it would undermine the distinction drawn elsewhere between male and female painters, for tureens are patently lighter than $\frac{3}{4}$ cwt wedges of clay. Within clay preparation, where men did perform much heavier work compared to the male painters and women wedgers, there is no need for this occupational aspect of their work to be stressed by explicit justifications since the women wedgers were not considered to be performing heavy work. More important distinctions here between men's and women's work surrounded the secrecy of body and slip compositions. Only men were considered trustworthy enough to exercise the judgement required in mixing the different clay ingredients upon which other craftsmen relied for the level of productivity, measured as 'good from oven', and therefore the level of their piece wages. It does seem that the fact that male throwers, pressers and casters piece wages were so dependent upon the properties of the 'body' achieved did make it unthinkable that they should be beholden in this material way for their livelihood to women.

In potting, 'perpetual jumping on one foot', further wedging of work-sized clay slabs or endlessly turning or treading wheels similarly go unrecognised as heavy work when women perform such tasks, yet these elements are significant in pointing up the 'skill' of the male craftsmen. Women seem to have been viewed as a mere (and almost invisible) extension of craftsmen,

their movements orchestrated by the movement and pace of *his* hands fashioning the pots.

Women in the Potteries are regarded as incapable of supervising work, or exercising judgement and skill, and are clearly not to be relied upon to keep secrets. Where women did in fact supervise work, as the women transferrers did, this was over children, but only of the same sex; the cutters they employed were girls. Women paintresses also had girl apprentices, but boy apprentice painters were segregated into a different workshop. Thus women throughout the potbank could only employ girls and exercise supervision over them. Where they did work with children of either sex, this was alongside them, under the supervision of men. This stands in stark contradiction to the ideological and practical role which women were expected to fulfil in the home, supervising and caring for children. The articulation of potbank gender categories is, however, both in contradiction with the prevailing ideology of the time and also reflective of it.

Claiming tureen painting as heavy work, only suitable for men, is patently absurd and in blatant contrast with domestic notions of women's work. The end users of tureens would have been women: carrying them to table filled with food or liquids was in no way considered heavy work.

The distinctions *between women* on the potbank, however, mirror the duality found in the wider domestic ideology concerning women's nature. Where women worked alongside men in dirty processes such as clay preparation and potting, they were considered coarse and vulgar. Their

language was bad, their voices rough, their appearance dirty and the standard of moral behaviour with their male co-workers in the isolated workshops¹ suspect. The painting 'ladies' and paintresses, by contrast, were considered 'ladies'; their work was relatively clean and, comparative to other women, skilled. The principal decorating workshop was all-female and thus their virtue seems to remain intact, unsullied by the presence of men. Though some women painters did work alongside male painters and gilders, their superior skill on the better class work and general social standing seems to have preserved their moral status, for only 'women of good families' could take up painting work.

All these features combine to mark them off from immoral women on the potbank; a distinction present in the wider ideology, and which feminist writers have hitherto seen as corresponding to only the broader spatial gender division of labour of home and work, public and private domains, which Evangelical notions of women's nature and role shaped. All women who worked in the period, by the very act of leaving the home and trespassing on male public space were in a sense regarded as moral transgressors; they were no longer the 'angel in the house'. In the Potteries, the creation of a moral distinction between women, embodied in the creation of a private sphere in the form of all-female workshops within the public domain of the potbank, similarly seems to allow these women to maintain a position on the 'correct' side of the ideological, if not the spatial, divide. Whilst this has key significance in elevating some women to the highest position among women workers on the potbank, there was no

¹ According to contemporary accounts, potbanks were virtual rabbit warrens of workshops connected by alleys and passages - see Footnote to section 5.3.3.

notion of morality attached to male workers. Within the painting department, women were excluded from gilding work, unlike male painters, and restricted to the simpler and lighter classes of ware. In relation to other men in the decorating workshops they were classed as relatively unskilled, and even where they did the same tasks as men, men combined it with other tasks of higher skilled status; for example, the enamellers, who also performed engraving and printing work. The very highest skilled work of modelling and sculpting was the sole preserve of men.

The *Morning Chronicle* correspondent cited in Ginswick (1983) makes a clear distinction in skill between artist-operative painters on the one hand, who either both traced the pattern outline as well as colouring it in, and those who simply coloured-in, where artistic skill in the higher sense of the term, is, of course, rarely required and, on the other hand, a 'good china painter' who, unlike the operative needs more than simply knack:

"a man must be endowed with an eye susceptible of the grace of form and harmony of colour, and he must possess a hand skilled in the necessary manipulation and perfectly steady.." (Ginswick, 1983:120)

The painting of circles following the rims of vessels required a 'beautiful steadiness of finger and brush ... the most skilled work of this kind is performed by men'. (ibid). Male painters received wages three or four times higher than female painters. At 9s. to 12s. per week, women painters were the lowest-paid skilled workers, on a par with the fireman's assistant stoker at 12s. (Ginswick, 1983:120).

5.3.3: Demarcation in the potbank

In detailing the broad division of labour and its sub-divisions we have touched upon several distinct demarcation features which inform these divisions and which also shape the hierarchy of labour within them. Even these brief insights will have conveyed both the extent and complexity with which these features combine to define the discrete workshops and the ranking of tasks and occupations within them. The division of labour within any individual department - both into its sub-divisional workshops and with respect to the ranking of tasks or occupations - is in each case a unique and complex combination of a multitude of these demarcation features. As we shall see, they are combined in various ways, with each feature possessing a greater or lesser degree of salience in any one case. Additionally, some criteria such as dirty or clean working conditions operate in a non-unidirectional way, serving both to mark off workshop boundaries and stages of production as well as delineate the sub-divisions within those stages. Other distinctions, such as heavy or light work, are applied to kinds of work and labour in a highly selective fashion with the result that explicitly heavy work, such as the wedging of $\frac{3}{4}$ hundredweight slabs of clay by women is not regarded as such, and with the consequence that it is not utilised in placing women workers within the hierarchy of the potbank, as is the case, for example, in the clay preparation department.

There are, however, some immediate and reasonably straightforward universal features shaping the division of labour. The broad division into the five major departments corresponds simply to the principal stages in the production cycle. Similarly, the sub-divisions of these stages or

departments are a logical outcome of the technical sub-stages performed in each and are broadly defined by the individual tasks involved at each stage: throwing, dipping, firing etc. The rationale for the spatial organization of these sub-divisions into discrete workshops is, however, less straightforward. Certainly conflicting working conditions needed or created by some processes places physical constraints on the form and task content of sub-divisions: throwing, which needs clay in a 'plastic' condition, cannot sensibly be done next to hot mould-drying rooms, whilst glaze dipping adjacent to dusty ware-cleaning would be equally nonsensical. These technical necessities apart, the rationale for spatial segregation of workshops, as we shall show, often seem to draw upon much less explicit demarcation features.

There are two other relatively universal features, which insert hierarchy into both the major departments and structure the tasks within them. It is important to emphasize that the focus here is on the major divisions: the five major departments and the loose 'pecking order' of the individual workshops that make up a department. In the case of the former, there is a graduated scale along which the major departments are placed according to the relative degree of dirty or clean work each stage contains. Clay preparation, patently a messy process, can clearly be discerned as laying at one pole, with the envied and comparatively clean finishing and warehousing departments at the other. Between these extremes the potting and firing departments sit in an apparently undifferentiated and neutral position. As noted earlier, certain demarcation features operate non-unidirectionally and this same scale extends down the individual major departments to stratify the sub-divisions. However, this is never a sole

element in stratifying tasks within departmental sub-divisions. The distinction often supports other indicators, most notably skill, to rank the sub-divisions within each department. This broad ranking of sub-divisions in each department I shall term the **task hierarchy** to distinguish it from a division of labour distinguished by authority relations. The distinction according to authority relations is particularly appropriate to the potbank, since it is only inside the sub-divisional workshops that we can properly speak of a division in terms of supervision and control.

Apart from the potbank proprietor, or 'master potter', there was virtually no external supervision of the individual workshops; each worked virtually independently under the supervision of an individual or group of craftsmen. Small potbanks, such as the one Charles Shaw worked in, had overlookers or 'bailees' as they were known, whose function seems to have been primarily to maintain time-keeping and a moral order rather than technically direct actual production.¹ Even in larger potbanks it was not unusual for control to be exercised directly by the capitalist; Wedgwood routinely checked production methods, and struggled to discipline certain categories of worker.

The potbank's division of labour is best summarised by analogy with a set of nesting Russian dolls: unpacking them and arranging them side-by-side gives the top tier set of divisions corresponding with stages of production, arranged along a sliding scale along the clean/dirty distinction, thus:

¹Potbanks, as mentioned, were often warrens of workshops linked by passages with plenty of scope for unobserved malingering of various sorts. Charles Shaw (1903) records several favourite pranks practised by children en route between workshops.

Figure 5.1
The Ranking of Stages of Production on the Potbank

Warehousing & Packing	Finishing	Firing Potting	Preparation
Clean			Dirty

Unpacking each of these we find yet another set of dolls representing both the sub-divisions of departments defined by sub-stage processes that are spatially segregated into individual workshops but, also lying within these is the task hierarchy. With this overall schema of the divisional patterns firmly in mind let us re-focus on the features which create them.

5.3.4: Internal sub-contract and direct employment

The extent of internal sub-contracting where workers employ assistants paying them out of their own wages, varies between departments and across sub-divisions. With the sole exception of the women transferrers in the Print Shop who hired girl 'cutters', all contractors throughout the potbank were men. The women transferrers were in turn sub-contracted by the male printer (who may also have been engraver and enameller). The Print Shop, incidentally, was the only sub-division of the Finishing Department to display such a high degree of stratification, the dominant feature elsewhere being a broad division of separate workshops demarcated by tasks with a well-defined task hierarchy based on notions of skill. Sub-contracting is

generally wholly restricted to the immediate attendants on the contractor, but again the Print Shop is unique in extending the practice down the hierarchy to other workers. In other departments where stratification is similar or more complex, workers below the immediate attendants are never mentioned as sub-contracted employees, but it is uncertain whether this is due to omission on the part of other writers or their direct employment by the capitalist was considered self-evident by virtue of such omission.

Internal sub-contracting is at its most developed in the Potting Department where it constitutes a virtually universal feature right across the entire set of workshops making up the Department to give a tightly-nested pattern of stratification subsumed under the well-defined task hierarchy. The strong presence of this form of employment mirrors the equally strong physical interaction between the contractor and his employee in performing the kinds of work found in Potting. The thrower's 'wheel turner' or 'kicker' and 'ballers' worked in physical unison with his movements, handing balls of clay 'just in time' for the next throw or maintaining a constant and accurate revolution speed of his wheel, like the turner's 'treader' who provided motive power for the lathe spindle. Similarly the hollow-ware and flat presser's mould-runners needed stop-watch accuracy to deliver fresh moulds and deposit completed ones in the drying room. The only sub-division of potting not containing any physically harmonious work group of this kind was handle and stilt-makers, who appear to have been employed directly by the capitalist. There is nevertheless one group who worked alongside the craftsman contractor who was not internally sub-contracted: all apprentices were directly employed.

With the exception of assistants to the millers and slipmakers in the clay preparation department and the fireman's assistants, who are referred to as men, all other attendants on the potbank were women or children. Again no reference is made in the sources to indicate that the male assistants were internally sub-contracted, and it is assumed they were not. As mentioned earlier, the single reference to women attendants as directly employed (Dupree, 1981) is not sourced, and all other sources suggest they were internally sub-contracted. The confusion probably lies in not making the distinction between the women attendants and other women workers on the potbank. Women were indeed directly employed, but women attendant upon male craftsmen are always additionally subsumed under the power and authority relations of the male internal sub-contractor.

5.3.5: The spatial segregation of the sexes

Where women did not work as attendants, the device of spatially segregating them into either all-female or women and children workshops, is another aspect of demarcation, especially in the Finishing Department. As discussed, spatial segregation overall serves to demarcate departments into sub-divisional workshops corresponding to sub-stage processes. The coincidence of the spatial boundary with a single sex occupancy is not, however, a straightforward sex segregation. Certainly it distinguishes women from male workers but it also operates to stratify along intra-gender lines, since spatial segregation can also mark off women from other women. The paintresses, working together, were considered to be 'ladies' and distinguished from other 'vulgar' women who worked alongside men. This

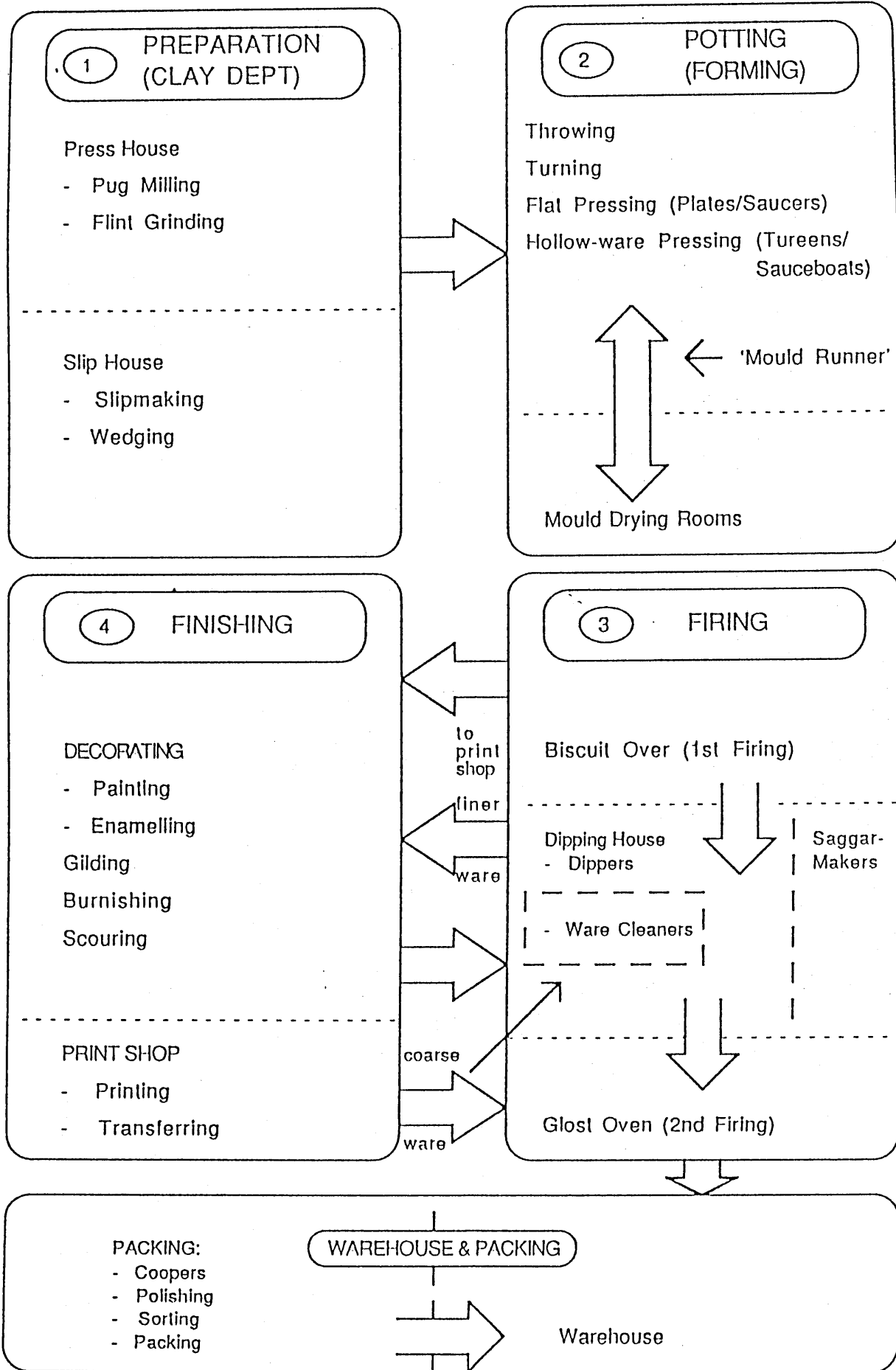
must be one of the few and most subtle physical expressions of the ideological dichotomisation of women as madonna/whore. In the climate of the times, which we documented at the end of Chapter 3, women who ventured out into the public domain were generally sullied by the very act of trespass into male space; going out to work for virtually all women in the nineteenth century tarnished their 'angel in the house' image. Lancashire factory women were pilloried for leaving behind their domestic duties, yet in the Potteries the public space of work had its private domains within which some women could preserve their morality. Indeed, the spatial-sexual division of labour within the public sphere of the workplace is almost a mirror image construction inside the potbank of the prevailing gender division of labour between home and work, to which quite distinct levels of morality referred during the nineteenth century. But, although spatial segregation was necessary, it may not have been sufficient to confer moral virtue. The scourers, working in their own workshop, had no such elevated moral status, but their work was unskilled and dirty and hence would have not qualified as 'ladies' work. Spatial segregation in this case would seem to be due to the purely technical necessity to separate the nuisance of dusty scouring from painting and other processes in finishing with which it would have been in conflict.

Spatial segregation of the painting ladies also has the effect of reinforcing their lower skill status and position in the task hierarchy relative to male painters and gilders. Whilst some women were gilders, only men combined this work with painting. Gilding was considered skilled work yet the women and their skill was devalued by the device of exclusion from male painting work. As already noted, painting was divided into more or less

skilled tasks; the male painters presumably dominated the former (free-hand work) whilst the paintresses performed anything less intricate. Male painters and gilders thus stood a cut above mere gilders or paintresses. Since male painters must have occupied a separate workshop from the all-female paintresses, and since women gilders are not recorded as an all-female workshop, they must have worked side-by-side with male painters. Indeed a contemporary woodblock print captioned 'painting and gilding' depicts both men and women in the same room, albeit seated back-to-back! The skill status of gilding is, it seems, sufficient here to preserve women gilders from moral contamination by the men but demotes them in the skill-based task hierarchy below the men, somewhere on a par with the paintresses.

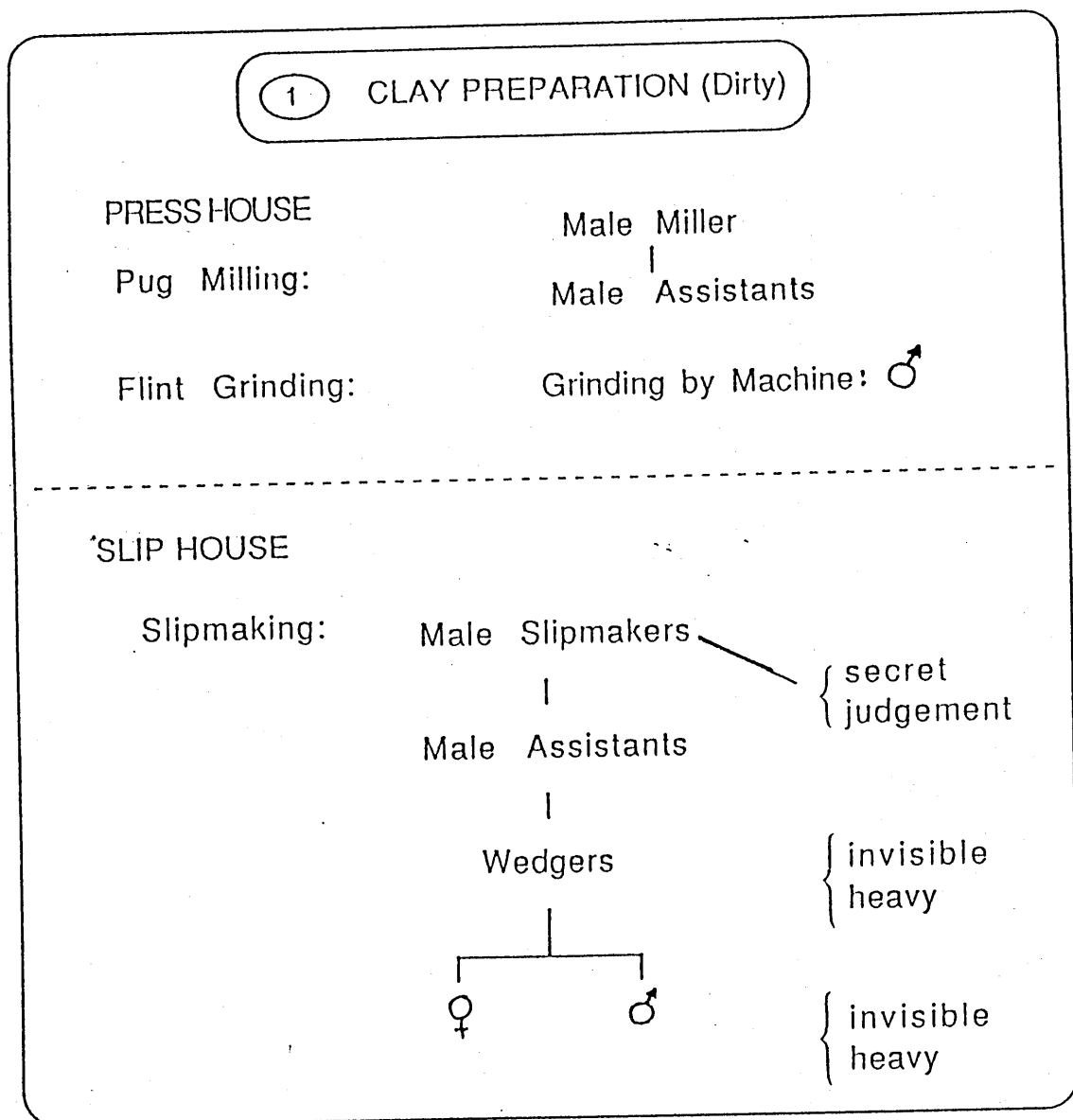
The following Figures 5.2 to 5.7 show the stages of production and the gender division of labour within each stage and complete our overview of the nineteenth century potbank.

Figure: 5.2: THE STAGES OF POTTERY PRODUCTION



----- = Spatially Segregated

Figure: 5.3 THE GENDER DIVISION OF LABOUR IN THE
POTBANK LABOUR PROCESS

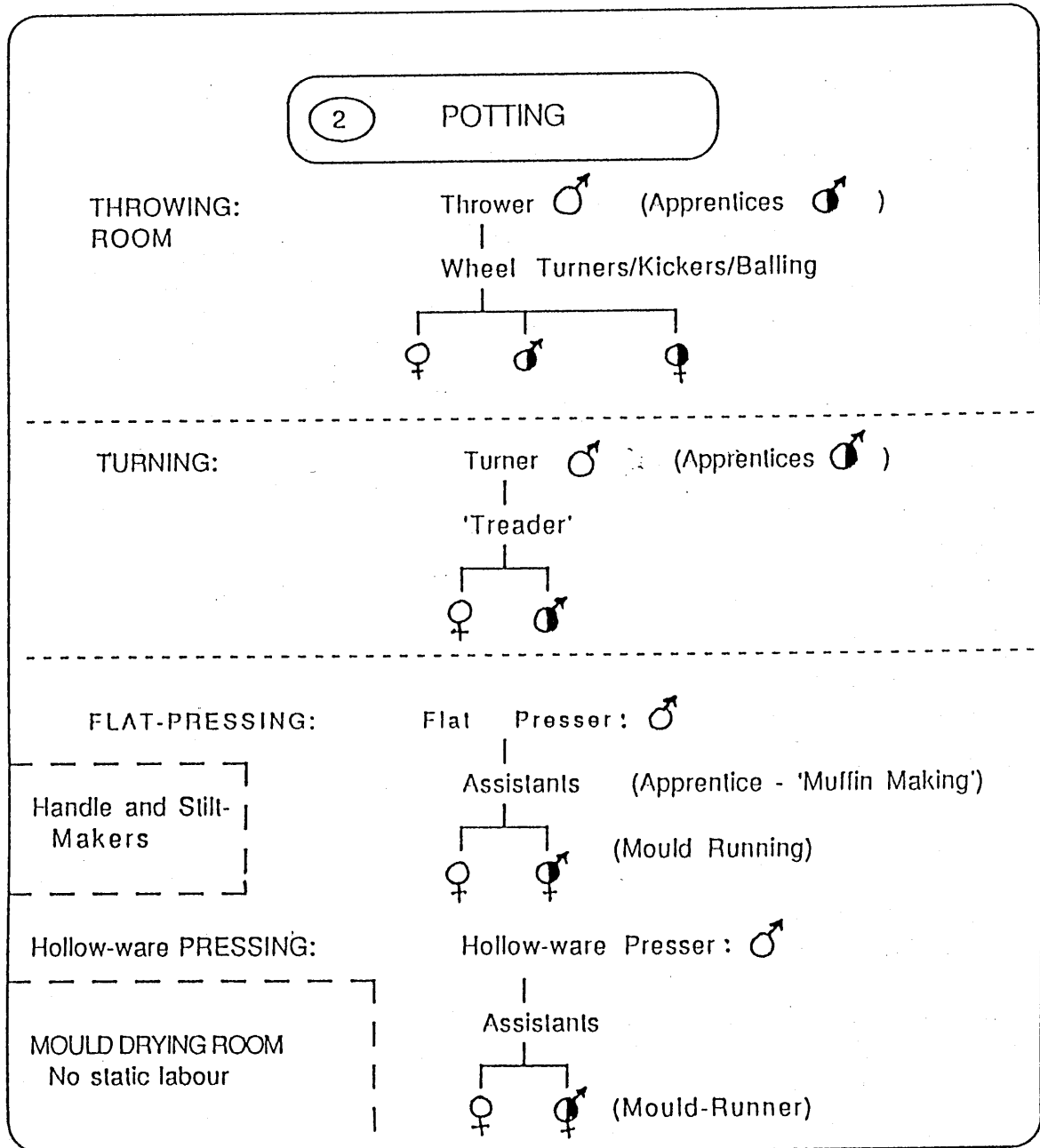


KEY: ♀ = Women ♀ = Girls ♂ = Men ♂ = Boys ♂ = Children

FEATURES: Dirty work throughout this stage
Slipmaking and Mixing of 'Body' secret
Very important stage - crucial to forming performance and durability in firing.

SOURCES: Dupree (1981); Whipp (1985a and 1979) Charles Shaw (1903);

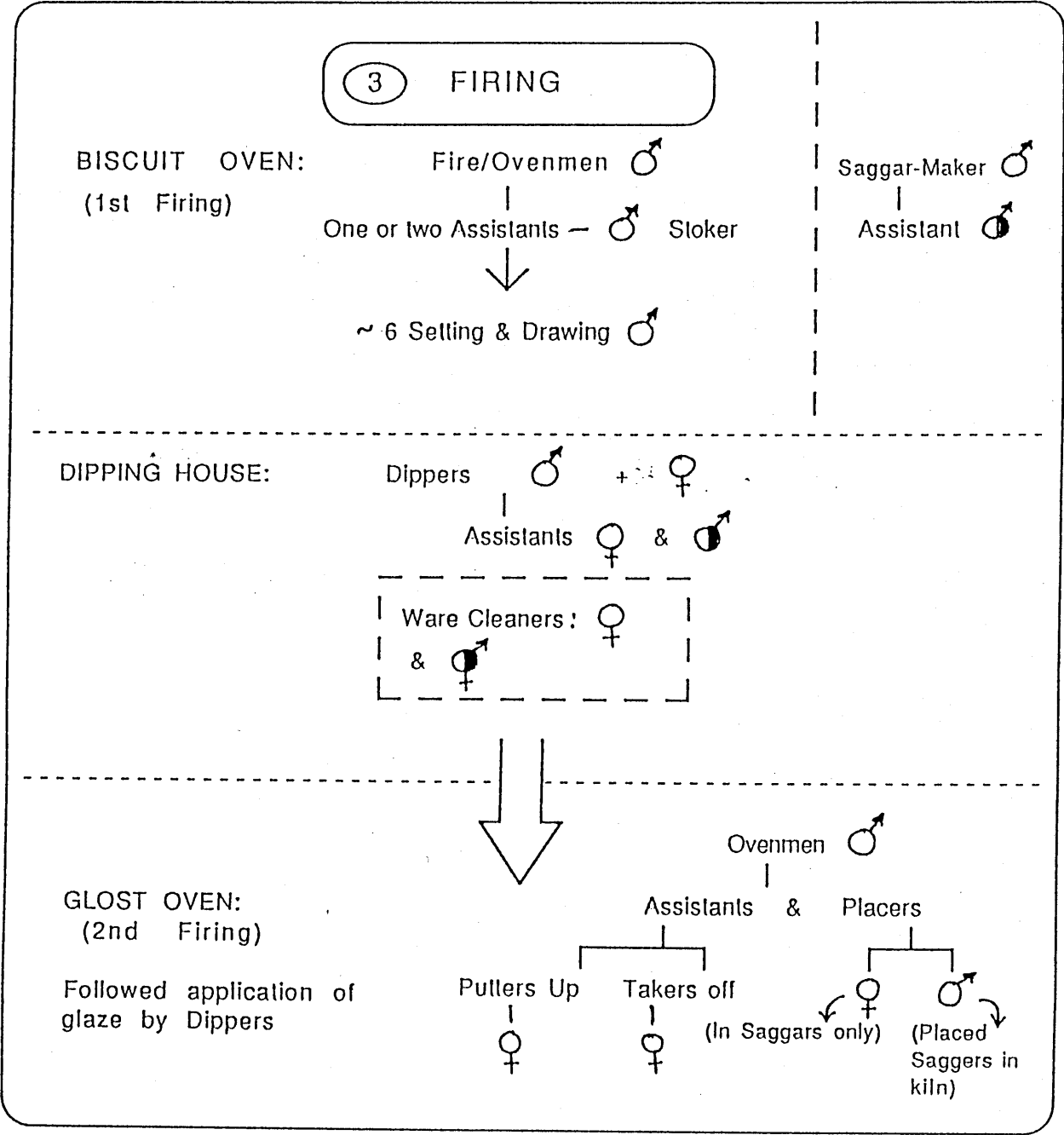
Figure: 5.4 THE GENDER DIVISION OF LABOUR IN THE
POTBANK LABOUR PROCESS



KEY: ♀ = Woman ♀ = Girls ♂ = Men ♂ = Boys ♂ = Children
----- = Spatially Segregated

SOURCES: Dupree (1981); C Shaw (1903); Whipp (1985a & 1979)

Figure: 5.5 THE GENDER DIVISION OF LABOUR IN THE POTBANK LABOUR PROCESS

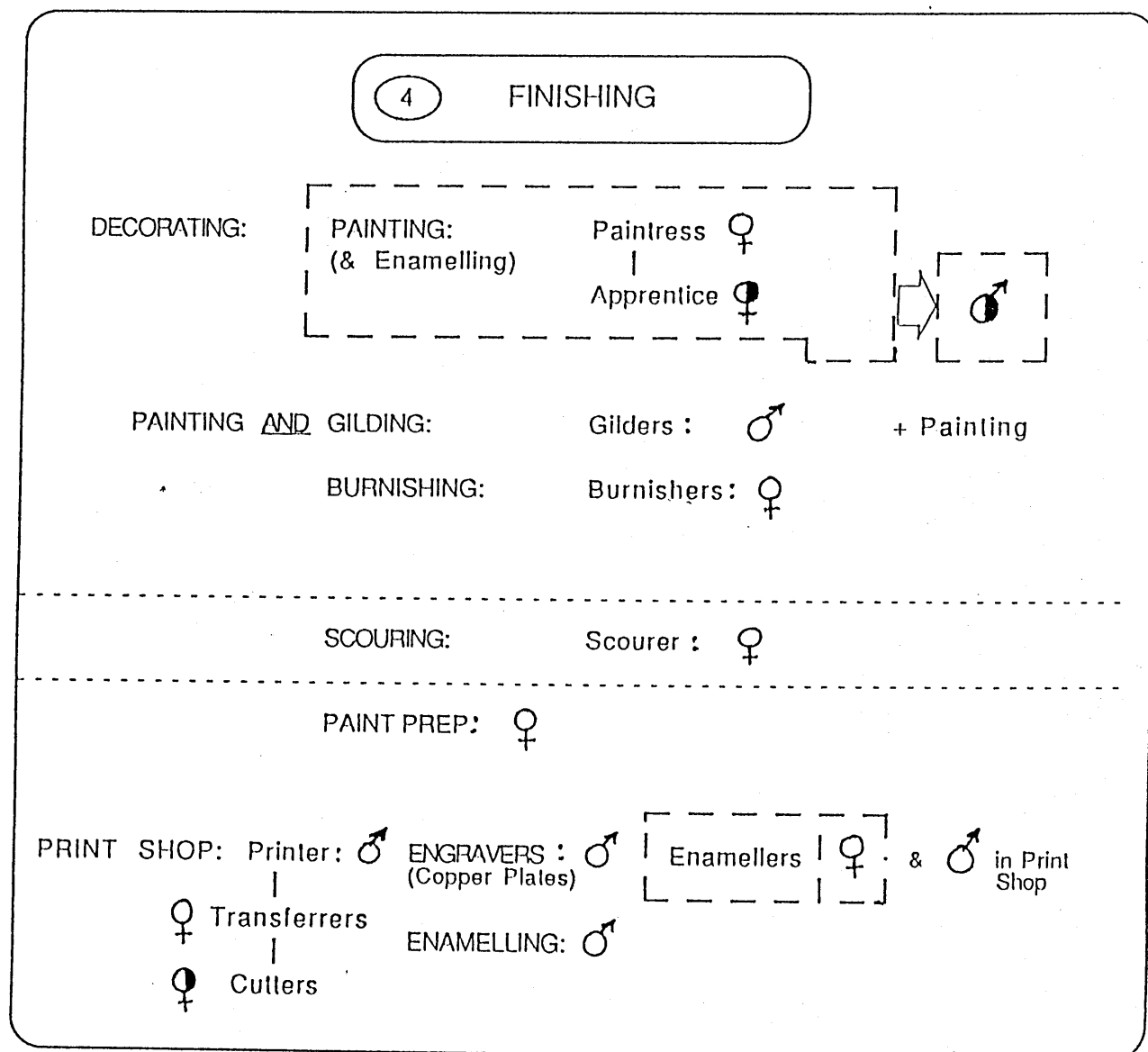


KEY: ♀ = Women ♂ = Men ♂ = Boys

FEATURES: Dangerous work in Dipping (lead glazes)
Dippers' assistant was internally sub-contracted

SOURCES: Whipp (1985a & 1979); C Shaw (1903)

Figure 5.6: THE GENDER DIVISION OF LABOUR IN THE POTBANK LABOUR PROCESS



KEY: ♀ = Women ♀ = Girls ♂ = Men ----- = Spatially Segregated

FEATURES: Paintresses and Scourers only all female departments, but differentiated by class: Painting; clean work/superior/for 'ladies'.

Male Painters combined the work with Gilding - highest skilled within finishing. Boy apprentice painters spatially segregated from and Painters.

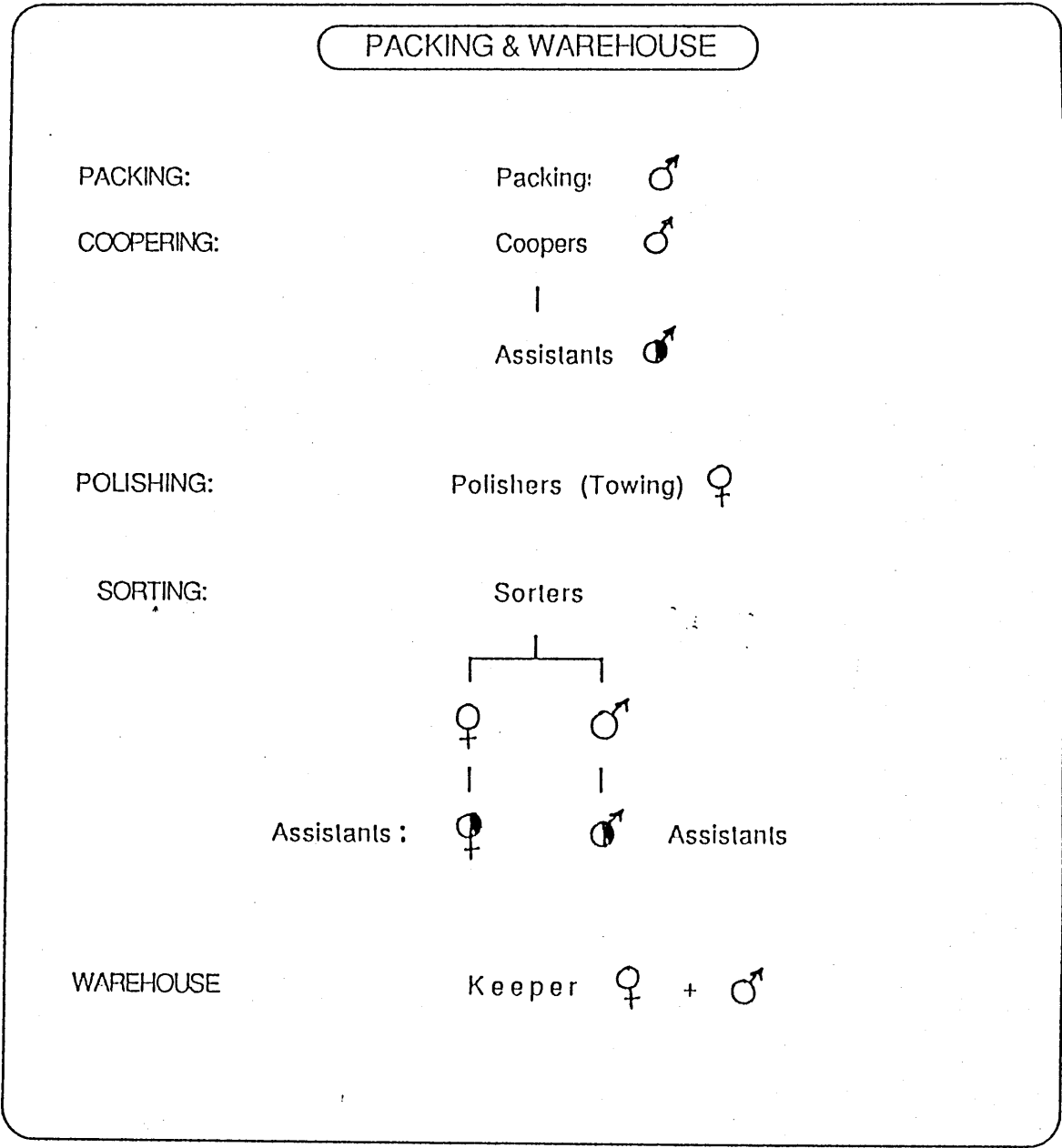
Transferrers a) only ♀ in finishing/internally sub-contracted

b) only ♀ internally sub-contracted by ♀

c) Although highly skilled work recognized, this was besmirched by the fact they worked with men and were therefore 'vulgar'

SOURCES: Dupree (1981); Whipp (1979 and 1985a) Sarsby (1985) S Shaw (1829) C. Shaw (1903)

Figure 5.7: THE GENDER DIVISION OF LABOUR
WITHIN THE POTBANK LABOUR PROCESS



KEY: ♀ = Women ♂ = Girls ♂ = Men ♂ = Boys
 ----- = Spatially segregated

FEATURES: Warehouse work was clean work and thus considered superior.

SOURCES: Whipp (1979 and 1985a)

5.4: The Contemporary Pottery Industry

5.4.1: The Overall Structure and ethos of the Industry

Still the dominant manufacturing activity in the region, it accounts for almost 50% of those employed in the top half dozen non-service industries with a total of 29,456 employees. The industry is overwhelmingly concentrated in Stoke-on-Trent¹ accounting for 28,421 employees with the remaining 1035 shared more or less equally between Stafford and Leek. In numerical terms men narrowly dominate the industry: 15,486 against 13,970 women employees, though this pattern is reversed in Leek where women marginally predominate.

The industry is one of the few remaining manufacturing activities open to extremely small operations. A modest amount of capital outlay on a kiln, a wheel and very simple premises are the only basic necessities to set up. A thriving community of small craft potters working as sole traders producing ware above or below small shop premises rubs shoulders with the large and famous producers supplying a mass market.

Getting at the gender distribution of employment across the industry is somewhat problematical. The Census of Employment is none too helpful since the *Bricks, Pottery, Glass & Cement* Order of the SIC is broken down into a mere five Minimum List Headings. These are the four specified in the Order nomenclature plus a residual category of *Abrasives & Building Materials n.e.s.* Consequently, the Pottery MLH comprises a whole range

¹Henceforth referred to as Stoke

of activities and products unable to be described as Glass, Cement, Bricks or Abrasives, ranging from ceramic electrical insulation products and sanitary ware to plant pots, tiles and fine tableware. The industry indeed divides along these distinctions in end product, among which the tableware division is by far the most important in employment terms (Whipp, 1985).

The primary distinction between divisions of the industry in terms of end product also gives rise to secondary divisional characteristics that further differentiate them. Associated with the nature of the product are differences in the range of production processes and production techniques. Accompanying these variations in labour process are differences in the extent to which mechanisation or automation can currently be applied.

By far the starkest contrast occurs between the tile and other divisions. Tiles are unique among ceramic products in being formed by the compression of moist dust rather than by means of shaping a malleable clay body. The preparation and forming processes, or the 'clay end' as it is known in the industry, is consequently far simpler than in the corresponding traditional 'clay end' processes in other divisions of the industry and is contrastingly automated to a far greater degree.

The divergence between those divisions with similar 'clay ends', such as sanitary ware and tableware, for example, comes in the range of processes applied to achieve the finished product, with tableware incorporating the fullest range by virtue of the great variety of finishing processes used in decorating the ware. Size, shape, end function and quality of the ware are

thus aspects of the product closely associated with production techniques and processes.

Accompanying these divisional characteristics is a basic sexual division of labour across the industry with female employment centred in tableware by virtue of their heavy concentration in all the 'decorating end' processes which are absent or truncated parts of the labour process in other divisions. This high profile in decorating, unchanged since the 19th century, together with the greater mechanisation and industrial feel of divisions such as tiles, sanitary ware or electrical porcelain tends to lead those in the industry to classify divisions outside tableware as male dominated. This is despite the fact that women in other divisions of the pottery industry also dominate any decorating or finishing processes, as well as being present (though not concentrated) in other areas of production work in the non-tableware sub-divisions.

These subjective assessments of the sexual division of labour within the industry were provided during interviews with tile and tableware manufacturers and are instructive in that they offer some insight into the process of gender construction. During the interview conducted with the Public Relations Manager of one of the high quality bone china tableware manufacturers, the manager provided employment figures for all the sites in Stoke and expressed his surprise that the statistics contradicted his expectation that the women workers far outstripped the number of male employees. In fact there were overall some 4,283 female operatives against 3,000 males; they do in fact significantly outnumber the men, but he had obviously expected them to do so to a far higher degree than these numbers

show. Comparing this information with that gathered during the study of the labour process at the holloware site where the PR manager was also located, it is easy to see how he arrives at a distorted image of the sexual division of labour. On this particular site there is far less mechanisation of the labour process, in contrast with, say, flatware operations located elsewhere in Stoke. Men exclusively operate all the mechanised processes. The relative absence of mechanised processes in the production of holloware leads him to project the familiar pattern he observes for the holloware site onto all sites. This was despite the fact that he was conscious of the extremely rigid sex-typing of occupations within the industry, and should therefore expect occupational variation across sites to correspond with variations in gender distribution for, as he remarked, when probed about how gender is distributed within the occupational structure:

"I could literally go down this list [the occupational groupings for the Pottery industry]¹ and say: 'Men, women, men, women' and I guarantee that I'd be 95% accurate." (Interview Transcript No: 1)

More pertinent to the way impressions of gendered work are erected in the industry was the response to my querying how tableware differed from say tiles:

"I would have expected that this relationship between men and women [in tableware] would have been reversed in tile manufacture because it's a much more industrial process; the great heavy stamping machines ... and that just seems more of a male environment." (ibid)

¹Available from the Ceramic Manufacturers Federation, Stoke on Trent.

So, what is the picture in tiles? Is it more 'masculine'? Well, yes it is - at least at first glance. The tile manufacturer visited had 139 male operatives against only 51 women, plus five foremen, who were indeed males, though this was taken as axiomatic when quoting employment figures. There were 75 other support staff grouped by function: sales, accounts, marketing, security etc. This functional classification of workforces, incidentally, was characteristic of all the industrial sectors examined; staff members, indeed anyone not directly engaged in production, was regarded in a gender-neutral fashion, though sex-typing of occupations among indirect workers is by no means less well-defined, but it clearly does not feature so saliently in demarcating groups as managements seem to perceive is the case for direct workers.¹

So, the evidence seems to bear out the hunch of our PR man in tableware. However, the tile manufacturing site had two company operations located there; one floor and the other wall tiles. The above figures relate to the floor tile operation alone.

The only visible difference between the two companies was the physical separation of floor and wall tile production into different workshops on the site. The two operations had until very recently been carried on at

¹Most of these production support jobs fall into categories that are well-established ghettos of female paid employment. As we saw in Chapter 2, women are still concentrated in a few occupations - among them catering, cleaning and secretarial/clerical work. These occupations form the bulk of production support activities. The often extreme physical segregation of these indirect workers from production workers is one component inhibiting the kind of internal and highly relativist comparisons that feature in other contexts (documented later) to socially construct gendered work. Whilst indirect activities exhibit a pronounced gender division of labour along occupational status lines - male managerial and technical/females doing lower status jobs, are not gender divisions justified so much by reference to the technical division of labour within the firm as by the horizontal and vertical sex segregation of the labour force as whole documented by Hakim, discussed in Chapter 2 (see Figure 2.16).

completely separate factories in different parts of Stoke and, at the time of my visit, transfer of the wall tile operation was still in progress. The removal of the decorating end had only partially been completed with the arrival of a small section of lithographers who apply 'transfer' patterns to the tiles. Still to come was the production of the top of the range and expensive wall tiles, as well as specialist parts of their range with highly-decorated surfaces of solid gold gilding or tiles with raised profiles where the basic tile shape is hand-pressed. (Hand-pressing was an exclusively female operation.) Along with decoration work which, in line with the rigid sex-typing of occupations in the industry, is also female, the production of wall tiles is unsurprisingly female dominated: 119 women against 90 men. Spatial divisions of the technical division of labour along gender lines within the firm seem as pertinent today as they were in the nineteenth century potbank.

What is surprising is that the floor tile end of the tile manufacture, with virtually no decoration involved and therefore few women workers, (apart from hand-pressers making such as step-edge tiles with bevelled edges, and other non-standard shapes) is taken as symbolic of the entire tile industrial sub-division, even though the gender pattern in wall tiles is virtually identical to that in tableware and could therefore just as easily have evoked a female-dominated classification of tile manufacture. As the gender breakdown of the combined total for wall and floor tiles reveals, tile manufacture as a whole is indeed male-dominated but, of course, the gendering process is not informed by these statistics, but reliant on subjective assessments from general observation.

The gendering of tiles by the PR man as 'more of a male environment' illustrates a classic component of ideology formation and maintenance in taking a slice of reality, the production of undecorated floor tiles, and presenting it as the totality. Like all ideologies it is grounded in a grain of truth, but not the entire truth and a simple shift of focus, as I argue, could just as easily have produced a contrary assessment. This raises the question of other factors which might influence the choice of focus; other differences between divisions that support that choice.

There exists within the industry distinct notions of status and hierarchy, cutting between and across divisions. At the pinnacle of this structure are the family firms producing fine bone china tableware under royal warrant; the household names of global renown and repute. The emphasis here is on craft as opposed to industry, on gentlemanly business and 'standards' rather than blind reaction to market forces or dogged adherence to profit motives as the *raison d'être* of production. There's as much emphasis here on 'breeding' as within the Jockey Club, though ferocious foreign competition, coupled with unfavourable exchange rates in a predominantly export industry, is beginning to influence this attitude. Even so, there is still abject horror at the idea of producing overseas:

"Oh no! It's all British made. Good God, we are a great British company and very proud of that. We hold six royal warrants and are a thoroughly British company and do not manufacture anywhere else in the world."(ibid)

Industry and empire seem to be as closely interwoven in this sub-sector of the industry as ever they were at the height of British industrial imperialism. And, in the manner of early industrialists, such supremacy confers the authority to view markets with some disdain and, in some areas of

production, there is still a certain air of superiority that they barely need heed the market at all:

"The markets are the old Dominians, and we sell a lot to the Middle East; the very expensive stuff. You can go out there [in the workshops] and find a plate that will cost you £3,000. That market remains stable. The sort of people who can afford to spend £50,000 on frippery are fireproof; it doesn't matter if the world plunges into economic chaos, they've got more than enough money to find that irrelevant."(ibid)

But recession has hit the bulk of the tableware business and the old values are increasingly at odds with the new realism that the pressure of foreign competition is forcing upon this sector. Loss of market share and the shrinkage of demand in their third major market due to recession in the United States has led to reduced output and the shedding of some labour.

"Before the Tories were elected [we] employed something like 12,000, so its come down to this [7,283] which is typical of the industry through the recession."(ibid)

This fierce competition in key markets, especially from the Japanese firm of Noritaki, coupled with a pound that was "sky high" means that pottery production is no longer 'cricket':

"They [the multinationals] source around the world, wherever labour is cheap or governments are giving them big bribes to set up. So they operate the way Honda operates or the way all multinational companies operate."(ibid)

Despite the battering by multinationals, who are clearly recognised as owing allegiance to no one country, the tableware division (or at least the prestigious companies within it) decline to get into the fray on equal terms by producing overseas. In this way they protect their key defence which resides in "the names" and their association with royalty. Onto the cachet of royal approval is hung a whole string of ideas associated with the quaintness

of old England, the romance of handicraft, the pride in excellence. The suggestion that they relinquish the ideals of patriotism and pageant in favour of harsh realism is as unthinkable as having Japanese robots make Rolls Royces in Taiwan. As the following quotations demonstrate there exists a complex interdependence between the idealism of the traditional fine tableware firms and the maintenance of the premium value of their products contained in their British origin, royal patronage and family firms exercising a craft of unparalleled quality:

"Everything is made here and the reason is that we're in the fortunate position that the world acknowledges that English china is the best. People in America and Canada wouldn't want to buy it if they knew it was made in Korea. People buy our china for the name on the bottom. People don't buy Porsches because they understand engineering, they buy them to prove what they are. We are in the status world."(ibid)

Whilst it is recognised that the ground rules of the 'game' have changed out of all recognition, the strategy of digging in deeper to the established trench, buttressed by a faith in the industry's traditional ethos and standards is seen as the desirable one to pursue. Indeed, until now it does seem to have prevented what some in the industry were forecasting a decade ago would be a collapse following the pattern of other West Midlands manufacturers such as Triumph and BSA who were likewise famed for their quality products: the competition that contributed to their demise and which now threatens the pottery industry is every bit as fearsome:

"The people that the pottery industry competes with are ruthless people - Japan, Korea, Taiwan, mainland China, Germany, Italy, France and the US. These people are not mugs when it comes to selling things and wage rates in Korea are a sixth of this town [Stoke] and the wage rates in Taiwan are less than that, so that makes it difficult to compete."(ibid)

A more serious and effective undermining of traditional values may come from within the industry's own ranks as family ownership dwindles as the predominant form of capital and new kinds of elite who no longer regard themselves primarily as 'potters' head these companies. The new breed are emotionally detached and oversee the business with dispassionate eyes:

"Our last Chairman was Richard Bailey. The General Manager of our Nile Street factory in 1872 happened to be John Bailey. On his [RB's] passport it said: 'Potter' - and he was - he could take his coat off and do any of the jobs in these factories; so he was a man who would say: 'Make [our ware] in Korea?! Over my dead body!' And that attitude still does prevail to a large extent."(ibid)

But, compare the new breed. This firm has just appointed a new Chairman with a rather different cultural background untainted by the traditions of tableware manufacture:

"He's been here a year. He's not a potter. He's the first Chairman we've had that hasn't been a potter, so watch this space. He is, essentially, an accountant and he wants to make money, and if it's not pottery it would be rubber ducks. That hasn't been the *attitude* in the industry." [my emphasis](ibid).

The interviewee's perception of his own role within the firm contains a hint of new directions in prospect.

"People like me are a new generation who are employed because we've been to university and are supposed to have taste and understand 'yuppies', who we're after."(ibid)

As it is, stress on tableware of superior quality and craftsmanship (sic) for the upper end of the market has ensured the continuance of traditional craft methods of production to a large extent. With few exceptions, the methods of making today's fine tableware are virtually unchanged from those employed in the first large-scale pottery factories established in the eighteenth and nineteenth centuries. Unlike other firms in the tableware

division geared to the mass production of narrow ranges where the prime aim is to manufacture to a given price for the finished article, there's little pressure to increase productivity or seek cost reductions by whatever means among the fine tableware producers. So far, the nature of the product alone has been sufficient guarantee that things will go on very much as before. In tableware firms producing for a mass market, however, the picture is very different:

"If you're banging out mugs that have gotta cost 99p then the pressure to mechanise is very much greater; we don't have quite the same pressures."(ibid)

Variation in the extent of mechanisation in line with shape, and particularly the degree and quality of decoration of different kinds of ware, means that even within tableware there are important distinctions based on the nature of the product. The fine tableware, with its rich variety of high-quality decoration techniques has a markedly different atmosphere compared with the mass producers and, of course, with the rest of pottery production.

"The factory is a one-off; it's the best china factory in the world. Full stop. There's a gilding studio here and its just mind-blowing how skilful it is, and a hand-painting studio. I suspect we're selling roughly the same amount of that as we were a century ago. No one else has kept it. You won't find a hand-painting studio anywhere in this industry - not on an industrial scale. We are unique."(ibid)

Quite apart from these specialist studios; cloistered rooms containing four or five workers separate from other forms of decoration, which are entered with all the reverence of shrines, (an elitism sustained from the early potbanks), the whole atmosphere of fine tableware production has that genteel and hallowed quality that the cultural norm deems appropriate to the production of its highest forms and finest objects. The making of fine tableware is a reverent, almost pious, act in the glorification of craftsmanship

and the dignity of labour itself. Braverman would have approved. These statements concerning the ethos of the industry's fine tableware branch place it at the apex, and are the referent for placing other divisions in the hierarchy..

From a historical viewpoint the general attitude prevailing in the industry today is, in a sense, an ironic twist of the ideology of their ancestors during industrialization, when industrial capitalists like Josiah Wedgwood represented the less acceptable face of capital accumulation, unrelated as they were to the gentry and landed interests. Today, Josiah's descendants echo the sentiments of the gentry who feared the rise of industrial capital by similarly viewing with disquiet sectors of their industry that likewise threaten to usurp their industrial/craft elitism. Their pattern of response is not unlike that of the former landed class. They resist with a counter-ideology which asserts that 'industry' in the nineteenth century forms they practice it, is above and outside industry altogether. It has become no less than the acceptable, respectable and cultured means of amassing capital, which is portrayed as almost incidental to the creative craft aspects of production. This is reminiscent of those landowners who projected themselves as protectors of rural England, agricultural tradition, and guardians of our heritage.

This dissociation from industry proper is a contrast that informs the assumptions underlying the gendering of different divisions within the contemporary industrial structure of the pottery industry. A crucial distinction, as we've seen, is between fine tableware which is not really 'industry' at all, and other pottery production which becomes classified as

industrial by default so that, when gendering different divisions, focus lights upon those aspects of the various sub-divisions that are most industrial. That is, as already suggested, those parts of the labour process under greater mechanisation and therefore inconsistent with notions of craft labour.

5.4.2: Fine Tableware : The Labour Process

The mechanisation distinction is indeed largely valid for fine tableware for it is relatively unmechanised and aspects of the nature of the product dictate that it will remain so in the short term. Most obviously much of the cachet associated with particularly expensive pieces expressly derives from their handicraft.

Notwithstanding the consideration of the handicraft premium, the industry as a whole is particularly difficult to automate. Clay is a fickle material and clay technology still very little understood. The unpredictability of states and performance given certain conditions means that a great deal of knowledge is still empirically derived and resides in the worker. This bolsters the sense of craft in the industry in an increasingly scientifically-informed and technologically-assisted manufacturing environment as a whole.

Attempts have been made to fully automate the 'clay end', but shapes more intricate than flatware (i.e. plates, saucers and other fairly flat objects such as shallow bowls) so far defy available technology. Even in other kinds of ware there are limits to the extent to which mechanisation is successful. For instance, whilst cups can be formed by machine, the handle and foot still

require application by hand. This has to do with the need for judgement in checking whether the handle is straight or the foot centred. Whilst their application by machine is unproblematical, the technology to visually monitor the accuracy of alignment is as yet insufficiently sophisticated. The more complex holloware (teapots, jugs and such like) is slip cast and although this could be semi-automated by filling moulds in a similar way to a bottling operation, the assembly of the mould and extraction of the piece from the mould still require the hand element since moulds slot together in jigsaw fashion.

Whilst the clay end is the most promising area for applying technology (and strenuous and costly efforts have gone into assessing the potential) production continues to be largely based on the traditional hand methods laid down during industrialisation with the addition of piecemeal and partial automation. The limitations are not, however, purely technical. The pottery industry at this moment is in an analogous position to the ancient Greeks who had a working model of a steam engine in the library at Alexandria. The technology was never utilised since, in a society based on slave labour, the economic necessity for dispensing with manual effort was absent. Similarly, in the pottery industry today the key restraint on innovation is primarily economic, for many of the current technical problems were not considered insurmountable:

"All this has been investigated: can't be done economically. No doubt if the government said: 'Here's £50 million, go and devise the technology' no doubt it could be done. You can develop a machine, but what people get paid for that[current labour costs]."(ibid)

Given the pressure from competitors in low-wage countries it is perhaps surprising that the trade-off between labour costs and the pay-back from automation is seen as insufficient to warrant investment. The other stumbling block is not, however, so manifestly economic in nature, and this has to do with intrinsic features of the product. Redesigning tableware with more regular shapes is a step that would immediately advance the scope of technical applications. It is nevertheless not a feasible option in fine tableware for it dispenses with, or greatly diminishes what are regarded as the essential features that contribute to its marketability as fine tableware.

"You've always got to have the hand element and a lot of our shapes might have flutes or scallops. If you wanted to use technology all your shapes would be regular shapes, but they're not. Lots of our shapes are funny shapes because our customers like funny shapes."(ibid)

The strength of fine tableware then lies in its ability to corner a lucrative niche of the market by maintaining the quality and craft gap between English and foreign-made china. Simplifying products brings with it the danger of prejudicing the rationale underpinning the consumers' choice of their product and thereby losing their grip on established markets.

A crucial element of the status value of the product over foreign ware resides in its comparative quality. It is here that British labour gains in economic weight. The aspect of quality accessible to the consumer is obviously in the quality of finish. Maintenance of this quality rests on continuous monitoring at every stage of manufacture, and it is here where economic considerations have greatest importance. The earliest possible detection of sub-standard ware has clear implications for production costs in the saving of energy, labour and materials costs that might otherwise be wasted on

glazing, firing and decorating imperfect ware, as well as reducing the amount of unproductive labour time. Quite apart from technical difficulties then, there are positive and sound economic reasons inhibiting full automation, even at the more feasible clay end where reject costs are at their most recoupable through the re-cycling of clay.

Mechanisation at the decoration end, of course, remains in the realms of science fiction for the time being. Some automated spraying of glaze is in use, but this is as far as it goes. Even the simpler techniques such as transfer application, though objectively a simple manual task, is fraught with difficulty when it comes to assessing whether the transfer is centred and free from tiny air bubbles beneath its surface which would lift the transfer during firing. As the PR man put it:

"People are just very good machines, aren't they? It is still very much a hand industry. The decorating end is 100% totally unmechanised here. That cup has been touched by *at least* twenty pairs of hands. The only reason someone pays £7 for that is the name on the bottom. But you protect that name by the quality. The point about machines is that they can't think. Every time an operative picks up a piece it is a quality control, so you get constant quality control all the way through; 19 pairs of hands, 19 quality checks."(ibid)

Clearly the day when intelligent machines can detect pinprick holes in glaze, air bubbles under transfers, the evenness of glaze coatings, uniformity of shape and so on, let alone perform the decorating tasks themselves, is a long way off; monitoring work that is done by operatives almost without thinking.

Given the limited changes to production techniques from those outlined in the earlier historical account of the pottery industry, instead of re-treading

those steps all I propose to do here is highlight the similarities and differences between the nineteenth century and today's labour process. In the case of the contemporary labour process, however, there is an opportunity to extend the analysis to compare the variation in labour process that occurs between the different divisions of the industry.

A historical comparison of these divisional variations is regrettably extremely difficult to construct. The focus of historical studies has been directed at the well-known early factories and personalities such as Wedgwood, who left a rich legacy of writings and other documents, with the result that detailed knowledge of the early industrial structure and variation in processes across product types is rather patchy, as already noted.

The nineteenth century distinctions between the clay end as dirtier and less refined than the decorating end still retain some currency but, instead of symbolising a dichotomy of social and moral standards as it did then, today the distinction between clean and dirty work marks the division between the industrial and craft labour processes:

"The clay end: much more a factory atmosphere. The decorating end still has a sort of studio atmosphere."(ibid)

However, the distinction still serves to gender the workforce. In the early factories dirty work and the lower morality it signified affirmed the masculinity of men in the clay end, whilst the women who worked alongside them were regarded as uncouth and, because of their dirty appearance, as unfeminine: not real women, in contrast to the painting

'ladies' at the decorating end. Neutered in this way, the very heavy work of wedging clay that women formerly performed at the clay end was rendered invisible and the clear contradiction it presented to the prevailing stereotype of women thereby defused. The 'pit brow lasses' and other women working in the mines of the time were scandalised in a similar way (Humphries, 1981). All this, of course, relied heavily on the climate of the times when the threat to the sexual division of labour as a whole was most keenly felt with the advent of women's paid work outside the home on a large scale and when the patriarchal response was at its most vitriolic. Whilst these 'double standard' views have to be seen within the historical context and climate of values, they merely represent the archaic **form** of the contemporary division, currently in formation, between the industrial and non-industrial. Given that the clay end today is the most mechanised, and that this area promises to be the first process to which automation will first be applied on a large scale, the distinction between it and the decorating end seems set to progressively diverge. Coupled with the fact that current mechanised processes are almost exclusively overseen by men, the old parameters are in the process of being redrawn along lines that more clearly demarcate the factory from the studio, the technical from the artistic, industrial from craft production and the masculine from the feminine in ways that will ensure that the 'factory' is not the place for women.

The extent of technological development within and between branches of the industry is, as we've already seen, influenced by the nature of the product. The low value-added producers have been able to extend automation to a greater number of stages of production, but its application is currently limited to the clay end of fine tableware production, and has yet to be

introduced by these producers, though the foregoing interview suggests that this is imminent. However, even here there are constraints on how far the clay end itself can be mechanised. The relatively simple 'flatware' shapes (plates, saucers) are formed on 'jollying' machines where a pancake of clay is placed over a mould and a profile tool comes down to score the foot as the mould revolves. This technology has been around since the nineteenth century, and still retains the definition of masculine work laid down at that time: "Men operate the machines. Never women." (Interview Transcript No 1). More complex ware, however, is still produced largely by traditional hand methods of slip-casting in holloware moulds which has always been and still is a male-dominated occupation.

Early versions of the jolly were powered by a hand-wheel turned by the male jollier's assistant; maybe his wife or a boy. Those assistants have, of course, disappeared with the subsequent application of automotive power. Even though the profiling is now automatic rather than being scored with a hand tool by the jollier, male labour has not been replaced by women operatives, attesting to the resilience of the established sexual division of labour which, as the interviewee has suggested, is extremely rigid.

The limited scope of technological development in fine tableware then correspondingly reduces the potential for destabilisation of the long-established sexual division of labour within this division of the industry. The scenario for the remainder of the pottery industry, however, seems set for a different path.

The much greater scope for automation deriving from the relative simplicity of shapes and absence of hand decoration of products that do not enjoy the protection a 'name' confers, means these divisions are both far more exposed to the external pressures of foreign competition and more able to exercise 'technological rent' solutions.¹ The stress on quantity rather than quality at a price means the threshold at which capital investment becomes economic is that much lower. These sectors are already far more advanced in the use of mechanical and automatic processes than their fine tableware counterparts, where the bulk of women are employed in the decorating end. Therefore, as the industry develops, there is likely to be an even greater counterpoint between the artful craft of fine tableware and the industrial atmosphere of the rest. This is important because the evidence suggests there will be a correspondingly sharper classification of these as masculine environments.

Contemporary and future changes in the industry then seem unlikely to radically alter the sexual division of labour *within* the labour process in individual establishments. Even though automation may develop to characterise large parts of the industry being seen as more masculine, there will still be women involved in decorating, checking and packing the products they produce. Within individual establishments, the increased productivity of the clay end, coupled with expansion of markets, may mean a corresponding expansion of female jobs in decorating. The overall balance of male and female employment in the industry as a whole may not as a consequence greatly change, but the sectoral distribution of gender

¹See Mandel, E (1975), p192.

across the industry looks set to be transformed as larger parts of it come to be characterised as industrial environments and thus masculine, leaving fine tableware high and dry as an island where females overwhelmingly dominate the labour process. This potential isolation of woman's work is very important indeed. As we saw in the historical section, physical isolation of women's work was one of the key ways of ascribing gendered work and as such skill and pay levels. In contemporary times, the isolation of women's work in the horizontal sex segregation of jobs (see discussion of Hakim in Chapter 2) is considered a major factor in ascribing unskilled status and low value to their work. In the current context of intense foreign competition from low wage countries the value of the distinction offered by this kind of physical isolation of men's and women's work for cheapening women's labour in decorating tableware would surely not be lost on the British manufacturers.

5:5 The Potteries Region Industrial Sub-structure

As explained in Chapter 4, the case studies span a range of industrial sectors; some because they were salient in employment terms for both men and women right across the region (the pottery industry), and others because the statistics suggested they were characterised by predominantly male or female work, as in the following examples taken from the *Electrical Machinery, Earth-Moving Equipment, Brewing and Biscuit manufacturing* industries. This group contribute less to the character of the Pottery Region's industrial structure as a whole (though they may dominate employment within an individual town, such as Brewing in Burton Upon

Trent). Nevertheless, they do, as the employment data suggests, represent the clearest instances of gendered work environments.

To recap on the rationale for these choices outlined in Chapter 4, having identified these 'masculine' and 'feminine' MLH activities, those TTWAs with the highest employment totals for these sectors were targeted, and the largest employer in the area subsequently identified. The process was greatly simplified in the case of Biscuits, which emerged as the sole female-dominated manufacturing activity identifiable in any of the North Staffordshire TTWAs making up the Potteries Region. Within the region as a whole there are in fact two other female-dominated manufacturing activities of greater salience to women's employment in the region, (Dresses, Lingerie, Infants' Wear & Insulated Wire and Cable, as Table 4.14 shows) but neither of these emerged as significant to the employment structure of individual TTWAs. The more dispersed distribution of these activities this signified, indicated that individual firms for case study would be extremely difficult to identify. Biscuit manufacture, despite not registering on any criteria established to identify either gendered labour markets or the overall labour market structure of the region (see Tables 4.4, 4.11 and 4.12, Chapter 4), was the only female-dominated activity to show up in any of the TTWA employment figures as important to that TTWA's employment structure, and thus offered the only case of a female-dominated work environment that could realistically be located in the field.

The choice of male 'enclaves' was slightly more complex. After the pottery industry the next two most important manufacturing activities for men are Rubber and Electrical Machinery followed, at some distance, by Brewing

(see Table 4.11). Rubber, for reasons of industrial secrecy, as explained, had eventually to be excluded. Even so, a fair amount of information was gleaned during the telephone approach and further information came unexpectedly from another interviewee.

Locating firms for Brewing and Electrical Machinery posed no problem. Both are heavily concentrated in economic and spatial terms; the big brewers in Burton-on-Trent and Electrical Machinery in Stafford. In each case these activities dominate the TTWA in which they are situated.

The individual TTWA data threw up a further male-dominated industry: *Construction & Earth-Moving Equipment*. It is the second most important manufacturing activity for men in the Uttoxeter TTWA, though, as the following table shows, there are other areas of activity more important for men in this TTWA; however, these lie outside our focus upon manufacturing activity.

Table 5.1
Potteries Region : Uttoxeter TTWA
Salient Gendered Labour Markets Compared with All Employment

Rank in TTWA (all emp't)	Dominant MLHs for men (Rank for men)	Dominant MLHs for women (Rank for Women)	Rank in TTWA (all emp't)
3	1. Agric & Hort.	1. Educ.Services.	1
1	2. Educ. Services	2. Biscuits	2
2	3. Biscuits	3. Other services	-
4	4. Cons & E-M Equip	4. Other retail distn	-

As the table shows, the Uttoxeter area is dominated by non-manufacturing sectors. The services were immediately disregarded on the already stated grounds that their dominance of the labour market is a near universal feature of all TTWAs, and thus contributes little to what makes a region (or aggregations of TTWAs as here) spatially distinct. Agriculture and Horticulture was also dismissed on similar grounds insofar as it lies outside the manufacturing criterion, though clearly it does, very often, (like other primary industries) have great significance in making an area spatially distinct by virtue of its very nature of being productive activity that is necessarily spatially fixed.

Both of the remaining manufacturing activities within the top four ranked in the Uttoxeter TTWA were chosen for case study. Biscuit manufacturing because, despite being a female-dominated industry, it also turns out to be the largest manufacturing employer of men in the TTWA, although only third in importance within the top four male employment activities, behind Agriculture & Horticulture and Educational Services. This structure of the male labour market in the Uttoxeter TTWA is unique among all the TTWAs from which case studies are drawn, for it signifies that the gendering of men is, unusually, not primarily related to manufacturing activity. Earth-Moving Equipment was selected primarily because it potentially offered, within one TTWA, contrasting sets of attributes and justifications for masculine work to those offered by males working in Biscuit manufacture; in other words: does the presence or absence of the opposite gender within the same local workforce produce differences in the way masculinity is constructed within a single workplace? Since Earth-Moving Equipment is almost entirely a male enclave, one might expect to find a different complex of constructing

attributes delimiting men's work from those found in the Biscuit industry. Here the presence of women and the wider understanding of the industry as a female-dominated one, is an environment that may influence the form gender construction takes by affecting the construction of men. It is likely, for instance, that construction in mixed gender workforces takes place with more direct and overt reference to the differences between men and women within the workplace - i.e. it is contextual, with possibly less emphasis upon wider notions of masculinity or femininity. In other words, the construction process may be negatively asserted in the sense that it relies most heavily on the **differential** or comparative components between men and women, and much less on positive general images of what it is to be masculine or feminine, as the case may be. More positively asserted gender construction, conversely, might be expected in Earth-Moving Equipment, where there is a virtual absence of women with whom to compare themselves. The reference points for determining masculinity are thus more likely to be less immediate and more abstract in nature, composed of the gendered attributes that have a much wider currency beyond the specificities of their application within a particular workplace. That is, they will have external reference to positive gender constructs as complying with the wider norm. If this is so, then it points to the possibility of **different masculinities and different femininities that are contingent upon the conditions of their formation**. Not only this, but, it also raises the possibility within a region of a hierarchy developing that not only structures gender relations between the sexes, but also structures the individual gender groups so that, for instance, you get a hierarchy of masculinities within a region structured by the degree of consistency a particular construction has with the most widely accepted notions of what is masculine in that area. Put another way, the closer the

affinity with the ideological stereotype the higher the position in the hierarchy. The diversity of male manufacturing work in the Uttoxeter TTWA offered exploration of these ideas in greater depth.

5.5.1: Biscuit Manufacture: Uttoxeter

The industry, as already mentioned, is the top-ranking manufacturing activity for both men and women in the Uttoxeter TTWA.

Like the pottery industry, the production process falls into two distinct parts. Everything from the mixing of ingredients through to the baked biscuit is known as the 'process' end, and this is followed by packing similar to pottery. The two 'ends' are marked by an extremely sharp sexual division of labour. All process jobs were done by men; the packing was almost exclusively women, though the cartons they filled were stacked on despatch pallets by men: young men. There have been no major changes in the organisation of production for at least thirty years in any part of the process end and for even longer in certain areas of it. Continuous ovens, allowing the biscuit to be baked on the production belt, for instance, have been around for about fifty years.

The thrust of recent change has been at the packing end with the major switch in retailing practice from selling biscuits loose by weight from a tin, to individually packed biscuits. Packing was formerly a highly labour intensive operation, done on a piece work system and was to some extent seasonal:

"When you go back 30 years when you were putting biscuits into tins, a lot of it was piecework and very much a question of cheap labour and packing biscuits that way in variable amounts, variable quantities of work throughout the year - it was an unskilled job originally."(Interview Transcript No.2)

The introduction of packeting has done away with all this for the most part, but special 'Selection Tins' of the kind that appear around Christmas are still selected and packed by hand and there were about half a dozen women closeted away off the factory floor doing this work. However, despite the introduction of packaging machinery, the packing operation is still comparatively labour intensive, accounting for 75% of the workforce. The bulk of these women are engaged in picking the baked biscuit up in 'slugs' (a stack or pile that is lifted in manner reminiscent of the classic brick juggling trick). These 'slugs' are then transferred to feeders on the packaging machines and, once wrapped, the packets are transferred from the conveyor belt into cardboard cartons for transportation.

This established pattern of production at the process and packing ends is, however, subject to impending technological change. Whilst it is expected there will be shrinkage in the level of the workforce at each end of the process, the opinion was that the numerical balance in the sexual division of labour would remain largely undisturbed. It considered unlikely that a markedly different pattern of sexual distribution across the detail division of labour would result.

The Process End

In terms of capital investment in new machinery this particular company readily acknowledged it trailed behind its competitors, who already have much of the process end automated. At this company, however, bulk ingredients were delivered from silos to a mixing tub or hopper sitting on a weighbridge. Control of the delivery was done by the manual opening of valves and visual monitoring of the weighbridge scales. There was also a fair amount of humping and carrying of sacks containing ingredients used in small quantities such as baking powders and flavourings, but these certainly weighed no more than a weekly load of groceries. The hoppers were then manually wheeled across to a large mixing blade, mixed, and then pushed again across the floor to be hooked onto a hydraulic lift which tips the hopper into the rolling and cutting machine feeder.

All these operations were carried out by two or three men per shift and some of the component tasks were indeed heavy work. The mixing tubs were about the size of a shipping crate and weighed 300/400kgs when full. Extra effort was needed to wiggle them into correct alignment with the hydraulic lift.

The newer technology dispenses with the need for judgement in weighing operations, whereas on this site 'mixers' referred to ingredients specification sheets; a component along with lifting tasks that constructed this work as masculine. In future all ingredients will be automatically delivered to a hopper and their weights computer-controlled. Trundling around mixing tubs will also disappear, and mixing jobs will be reduced to monitoring and fine-tuning ingredients to compensate for variations in the strengths of flour, flavourings and the like. With the new technology, the first sighting of the

ingredients will be at the point where they emerge as a luscious sheet of mixture on the rolling and cutting machine conveyor belt. As a consequence, mixing work will be a far cleaner operation than it is currently, removing a further aspect ascribing the job as masculine. (The working environment as a whole could not be described as pleasant. The noise from the packaging machines, the heat from the ovens and the nauseating aroma in combination amounted to a fair degree of discomfort for all workers.)

Some of this discomfort will be reduced for the mixers at the process end, along with some aspects of their jobs that currently determine their skill level. The elimination of manual transfer of mixing tubs will likewise eliminate the need, as the Production Director put it:

"...to use relatively strong, relatively young men in the mixing process." (Interview Transcript No. 2)

Nevertheless, the operation is likely to continue to be overseen by men as a consequence of the existing interchangeability and overlap between mixers and the 'ovenmen' who supervise the next stage in the production sequence. Unlike the mixers, however, the operation of ovens in itself has no clear justifications for being a masculine job: its masculinity in the main relies upon the ovenmen being interchangeable with the mixers:

"That [the need for strength in mixing] tends to be spread over onto the ovens where, because the skills are interchangeable, we tend to have men there when there's no real reason why an oven shouldn't be run by a woman just as much as a man." (Interview Transcript No.2)

The ovenmen themselves indeed justified their position in terms of the interchangeable nature of their 'skills' with mixers and, apart from a very strong woman, they said, women would find it difficult to push mixing tubs around. Whilst this is indisputable, it should be noted here how both the Production Director, quoted above, and the ovenmen's comments translate muscular strength - an attribute - into skill. Introduction of new mixing technology, in destroying the basis of their claim might be expected to open up the operation of ovens (or even mixing) to women as, what is essentially muscle transferability becomes defunct, but the Production Director pointed out that as far as he knew this had not been the case elsewhere:

"Even so, in factories where this is automated, mixing and baking is still very much the preserve of men." (Interview Transcript No.2)

This being so, appeals to physical strength as a component in their claim to skilled status are now clearly invalid, and it would be interesting to know how the premisses have shifted, as they must have done, to maintain the boundary cordoning off this work as 'men's' work.

Merely as an aside at this stage, but introducing a theme taken up more fully elsewhere, we should note that the concept of strength itself has an integral masculine bias. Strength is heavily overlaid with a notion of the physical properties of things. Rarely do we speak of emotional or mental strength. Indeed the evidence that it is a primarily physical connotation is contained within the grammatical structure of that last sentence for, as I have just done, the word has to be clarified by prefixing it with the adjective. It is quite impossible to say "strength" and have it mean emotional fortitude,

except perhaps in feminist circles where describing a woman as "strong" does denote this.¹

One feature of process end jobs that may well have increased in significance in distinguishing them as masculine and distinct from women's packing work is the separate shift systems worked by the two ends. Indeed, the Production Director suggested that the shift structure at the process end might prevent women from entering the male preserve. This is puzzling, for whilst men and women (process and packing) do work different shift systems, it is difficult to see how this has any bearing on the matter because they both cover the same working day. Both men and women are present on the factory floor 24 hours a day. However, if we examine the shifts more closely the differences emerge. The packing shift system is structured around female labour. The very explicit structuring of these shifts around women's labour seems to be sufficient in itself to define the male process shifts as peculiarly masculine, though in reality this is entirely spurious.

During the fieldwork mention of gender-based shift systems usually meant that men only worked the night shift, and, despite the fact that there is no longer any restriction on women working nights, many of the case study interviewees still treated male night-working as axiomatic, dismissing notions it could be otherwise with a matter-of-fact statement that usually went: 'men, of course, work the night shift'. This is not, however, the basis of sexually differentiated shifts in Biscuit manufacture. The nature of the product means it has to be wrapped very shortly after baking. Packing

¹This touches on the much wider issue of the social construction of language itself as patriarchal in nature. (Spender, D (1980) *Man Made Language*).

is therefore integral to the process end and women work nights just like the men. Or, to be more specific, women and men can be found on the night shift six nights a week. The situation for individual men and women is slightly different. Here we have to go into the fairly complex set of systems that operate over the 24 hours. It is slightly complex, but worth the effort to fully grasp the points I make about it.

The Shift Systems

The factory operates 2 x 5-night shifts, overlapping by four nights to give a six-night operational week. So, you'd either work Sunday to Thursday nights or Monday to Friday nights. They also have a six-night week that is divided into 2 x 3-night shifts, with individual workers doing Sunday, Monday, Tuesday, *or* Wednesday, Thursday, and Friday nights. The length of these two shifts varies. Five-night shifts are 8 hours, worked from 10pm to 6am. Three-night shifts are 10 hours, starting at 10pm again, but working through to 8am. Five-night shifts give a 40 hour week and three-night shifts a 30 hour working week for the individuals concerned.

Given that there is an hourly premium for working night shifts and that this is generally one of the prime reasons for resistance to women doing nightwork because this would erode pay differentials between men and women doing the same work (as we shall document for the textile industry later), the fact that there are lots of women working nights here looks like good news. Until, that is, you take into consideration that fact that the 3 x 10 hour shift (30 hours) is worked in packing by women, and the 5 x 8 hours (40 hours) at the process end by men. Linked with the fact that 30 hours constitutes the boundary for work to be legally classified as part-time,

the gender division of night work becomes extremely clear. What the women gain by working nights in the extra hourly premium is therefore lost by discounts in the basic hourly rate for part-time work. In addition, of course, part-time status disqualifies them from receiving full employment protection rights. This maintains a clear differential between men and women on nights and women's shorter hours and, I would hazard to guess, means women's weekly earnings stop short of men's weekly pay - even for the day shift.

This gendering of shifts, as we shall see in other cases, is a major way in which men in mixed gender workforces maintain pay and income differentials over the female workforce. This bolsters their claim to masculinity within the individual workplace concerned, but it also highlights the complex and circular pattern of gender construction. Being better paid than women, their patriarchal authority within the domestic division of labour is also reinforced. Decisions over the allocation of household resources, particularly the family's labour, are thus economically biased in favour of the 'breadwinner'. Being the 'breadwinner' simultaneously enters into the justifications used by men to justify their higher value in the labour market which in turn reproduces their 'breadwinner' status. Gender relations inside and outside factory gates are thus mutually reinforcing and interdependent. The structure of the shift system is patriarchal. More commonly the patriarchal form of gendered shifts lies in the split between days and nights, as already suggested, where men only work nights and thus have an exclusive claim on shift premiums in hourly rates of pay. In Biscuits, because packing is integral to processing and packing is strictly women's work, the men have had to be just that bit more resourceful in their

means of maintaining the gap in pay. The structuring of the night shift, provides the key to understanding the pattern of day shifts, because the two have to dovetail.

So, at the process end, with men on a 10pm to 6am night, there is a 'double day' shift: 6am to 2pm and 2pm to 10pm. Similarly, the packing day shift follows on from a 10pm to 8am female night shift to give a standard working day of 8am to 5pm, for which, note, there is no unsocial or shift premium of any kind, whereas the men's day work is shift work. The women's standard day, by contrast, does not conform to accepted notions of "shift" working. Having a standard day on standard rates of pay, leaves a gap from 5pm when they finish work, through until 10pm when the women begin the night shift. To fill this gap, they have the classic 'twilight' shift from 5pm to 10pm. Throughout industry this is well-recognised as a women's shift, since the hours of work coincide with those when alternative informal child-care provision by others is at its maximum. The structure of women's shifts then means that their working hours are restricted to those where there is either no possible claim on extra hourly premiums (day work) or where such premiums are negated by their part-time status (nightwork). Since all the female night shift are part-time, and the 'twilight' shift (5 hours) is also part-time (these twilight hours alone account for more than half the total of 9 day shift hours covered by women), the primary status of women working in Biscuits is that of part-time workers and hence lower paid workers. All the men's shifts, by contrast, have full-time status, and all have some level of premium attached to the hourly rate for shift-working - irrespective of whether they work days or nights. It is this gendered structure of shifts that is, in my opinion, the most forceful factor

maintaining the 'process = men/packing = women boundary' - far more than vague appeals to muscular strength, or the need for interchangeability among mixers and ovenmen at the process end. When the 'muscle' argument atrophies when newer technology is introduced, the structure of the shift system is likely to become even more central, and it is perhaps a recognition of this that prompted the Production Director to mention the process shifts as being likely to secure this male preserve.

Finally, on the question of shifts, there is just one exception that should be mentioned. A handful of novice men, (that is young men referred to as 'lads') do work alongside women in packing, both on days and nights. However, their position is regarded as a transitory one; a preliminary to moving over to process work or better things within packing:

"Now those [packing jobs] are typically women. There are some men but mostly young men. The better ones regard the process jobs as something to progress towards. There are one or two skilled jobs developing in packing like, for example, we're developing what *were lads* to set up all the coding on the wrapping machines. Sort of semi-skilled jobs are starting to develop where we are starting to specialise and we're making them men." [my emphasis].(Interview Transcript No.2)

Undoubtedly mindful of the import of this statement, the Production Director immediately followed up by adding that an effort was being made to train the better women machine operators:

"We're trying to bring through some of our better machine operators because packing ranges from just putting a biscuit into a box or into a tray or onto a conveyor, to quite sophisticated operations when you're *minding* quite a complicated £80,000 wrapping machine. Now those are typically women." [my emphasis] (ibid).

Coding the machine, however, sounds infinitely better than minding it, doesn't it, though it seems there are even undercurrents of resistance to women doing the minding:

"It was an unskilled job originally. It's *become* increasingly skilled and some of the women are *increasing* their skills." [my emphasis] (ibid).

Just note here that the work already appears to be implicitly acknowledged as skilled but that the women, by "increasing" their skills, still seem to be in a state of progression towards attaining skilled status. The Director expanded the point and in the process quite unwittingly quashed his efforts at redemption:

"You still get comments like 'Oh, we could do with a few more men on those machines - at least they care a bit more' but the *better women* are as good as *any* man." [my emphasis] (ibid).

There are new skilled jobs up for grabs on the newer packaging machinery and what these comments show is that the arguments are already beginning to shape up along the lines that expensive plant needs careful attention which, voila, men can provide! In any case, as the above quote suggests, men set the standard, for "better women" are as good as "any" man.

The struggle between these better women and men is nevertheless likely to get diffused in the confusion arising from the re-distribution of supervisory jobs. Hitherto, all supervisors had been men, and thus the weight of supervision fell at the process end.

"We basically said that was ridiculous because all the people are at the packing end, and we must have 50:50 women and men supervisors now. That's really quite a departure and I think

we'll find the women have a bit more say in what goes on as a result of that." (ibid)

The "better women" then will be diverted to supervisory jobs though so far, note, not in proportion to their numbers, and only supervising other women at the packing end. Some of the potential contest over new skills in packing consequently gets diluted by diversion. Further, women promoted to supervisors simultaneously lose their influence within the union since all supervisory grades are non-unionised. The 'better women', who are probably also the more articulate among the packing women, are thus relegated to having a much weaker influence over the skill definition process within the union where women are already disadvantaged by virtue of their much lower proportional representation in the union membership. Whilst they account for 75% of the workforce at the site, they make up a mere 30% of this TGWU organised shop. "Having a bit more say" then turns out to be a fairly restricted channel of communication to and fro between management and workforce on a day-to-day rather than strategic basis.

The Ovenmen

As we've seen, changes taking place on either side of the baking process widen the scope for a re-classification of the ovenmen's skill. A prime attribute of the ovenmen's job that contributed to its masculine nature, hinged on the linkage between baking and the physically arduous mixing. Other aspects of baking work appear to rest on much shakier foundations:

"The skills at the other end [from packing] in terms of the baking process, mixing - they're not - it's very difficult. People would say: 'Of course, you need bakers' - you do need people who know how to pick up a biscuit and actually look at a biscuit." (ibid).

We're now on familiar territory. As with the pottery industry (and others that are documented here) one aspect of skill resides in judging the quality of the product: in pottery in the mixing of the clays. In some sense the nature of the product in the two industries is similar. The material is fickle and a similar set of supposed skills are constructed around the assessment of its state, for baking is also largely empirically-based knowledge acquired with work experience. This fickleness also makes the baking process difficult to automate.

"In time, the bit you can define fairly well is fairly skilled, but could be written down on a page or two. But, you know, your old timers do a bit more than that - they've got a feel for whether you ought to twiddle with one knob or another or reduce the cut, change the damper settings on the oven rather than do something else with the ingredients, and there is a fair degree of art. I mean, flour is different all the time. It varies a lot. It is not, well, you can't program an oven to turn out a decent biscuit every time. There's still a fair degree of feel to the thing rather than science." (ibid)

This, you will note, amounts to no more than a justification for **human skill**, the human element or, as our PR man in pottery expressed it: 'people are just very good machines'. It has nothing whatsoever to do with gender. However, given that the caring qualities of men are regarded as superior when faced with expensive and sophisticated machinery at the packing end, this may well be an attribute pressed into service to ensure continuing male control of ovens once the support of the mixing link gives way. It is this link, by the way, that effectively eclipses the remarkable affinity the ovenmen's job has with domestic baking performed by women. Just how this will get worked out in reality cannot easily be foreseen, for this and other gender struggles within the workforce are overlaid with the class struggle between capital and labour. At this site capitalism and patriarchy

are potentially at odds over the gender domain boundaries, since management have countervailing reasons for wanting to see the boundaries changed, but the concomitant of this would be to disenfranchise the male workers from exercising their patriarchal practices unrestrained, passing control to management:

"I'm keen that there should be some women's jobs at the packing end that are paid the *same amount* [as the common process grade - i.e. women packers are lower paid]. It's not the sort of thing that happens without you doing something to make it happen. It would be great to get a couple of women running ovens. We've [management] talked about it because I think that it would be good for the men, quite frankly. It is my experience that where you do manage to get women into jobs normally done by men, it actually makes the men do their job that little bit better at times." [my emphasis] (ibid).

Patriarchal relations at work are thus contradictory. The inequalities produced by gender construction processes and the structural advantage the men derive from it only serve to weaken their position within capital-labour relations. In mixed gender workforces, women have their uses in manipulating male work effort. This tends to suggest that those commentators on employment relations who claim labour ultimately retains control over work effort may be oversimplified. Edwards (1979) has, of course, been particularly successful in drawing attention to the evidence that controverts such a simplistic view. However, despite his attempts to provide a typology of forms of workplace control by capitalists and show how the nature of worker resistance varies with the form it takes in particular workplaces, his analysis is still couched in terms of the dialectic between capital and labour. As such, he fails to part company with the dominant patriarchal academic wisdom that labour is homogeneous other than in ways that are believed pertinent to the capitalist: in skill level, cost

and degree of militancy. The 'contested terrain' of the title of his book is thus a domain populated exclusively by male labour and thus blind to the dynamic gender relations introduce. Clearly this is not a view entirely shared by capital who, recognising the potential of patriarchy, press it into service in the capital/labour struggle to convert labour power into useful labour. Even so, there are limits, as the following quotation suggests:

"It's a little bit difficult to say whether there'd be a problem here, but because of their individualistic nature I think there might be. I think it would depend on the individuals who were affected quite frankly. I can think of one or two that might stir things up, but it would all depend on what was perceived as the greatest pressure." (ibid).

Clearly, the point at which the patriarchy tactic is discarded is reached when class relations are in danger of erupting to the extent that any gains achieved are potentially annihilated by the losses incurred during any class battle that might ensue. Any resistance offered by the men will undoubtedly appear to management as an issue of a class nature, (extracting maximum work effort from labour) and indeed the men's battle dress may be styled along class lines, but essentially they are patriarchal wolves masquerading in the sheep's clothing of class.

5.5.2: The Brewing Industry

Brewing, the staple industry of Burton-on-Trent, has a tradition as long as that of the pottery industry. Beer has been brewed in the town on a commercial scale for approaching two hundred years. Today it is still the dominant employment in the Burton TTWA, but only marginally so. Around it have developed a greater diversity of manufacturing activity providing employment on similar scales to Brewing and Malting. This more

diversified local economy contrasts with Stoke where the pottery industry far and away outstrips any other form of employment. The most notable of these other manufacturing industries in Burton are *Rubber* and *Electricity supply*. As elsewhere, with the exception of Stoke, the big two service employers of Educational Services and Medical and Dental Services are more numerically important than these manufacturing activities. These services jobs account for the bulk of female employment, whereas male jobs are concentrated within manufacturing activities. The Brewing and Malting MLH is the primary employment activity for men in the TTWA, but it nevertheless ranks as fourth in importance for women in the area, behind *Other Retail Distribution* and the 'big two'. This indicates that the sexual division of labour is not a simple sectoral dichotomy of service employment for women and manufacturing employment for men. However, unlike Stoke and Uttoxeter where manufacturing also figures prominently as an employer of female labour, the women who work in Brewing and Malting are completely absent from the production process. Instead they are concentrated in administrative and other production support areas of Brewing activity. Brewing, as a production activity, is thus male-dominated.

The brewing firm visited was the headquarters of a large and diverse group of companies with some 78,000 employees spread across a whole range of activities. Apart from the brewing activity itself, they have interests in several industries closely related to the production and consumption of their products: public houses, off-licence retailing chains, restaurants, vineyards, hotels, catering, the travel trade, leisure complexes that combine bars with restaurants, cinemas and nightclubs; vertical integration par excellence.

The brewing operation is split between several companies and each of these is divided into geographical divisions. The brewery visited in Burton was one of seven comprising the Midlands division, with three other sites in Burton and three in Birmingham. Total employment in Burton was around 1800, with 473 of these employed at the visit site. The interviewee, the Personnel Manager, could say little about other sites or other parts of the Group as each constituent company operates discretely.

Whilst the site was ostensibly a brewing operation, the same firm ran several other interests connected with the site's importance to industrial archaeologists. Established on this spot since 1777, the site incorporates a substantial leisure and educational complex including a brewing museum, stables, joinery workshop, shop, restaurant and bars, where visitors can also tour the production process. It is in these leisure and recreation areas, together with cleaning and office work, where women are employed. In the industrial heritage complex most of this employment is part-time. In all, women comprise 11% of the workforce at this site.

Traditionally, beer was brewed by women at home or by ale-wives who sold it on the street or in the taverns they ran. Not until the end of the eighteenth century did beer begin to be supplanted by the growing habit of tea drinking. Strong ale was twice the price of the weakest 'third straining' costing three farthings a gallon so, for some time, this 'small beer' was the basic drink of children and the very poor; hence its use as an unfavourable term of comparison. Today, the brewing of beer is overwhelmingly male-dominated. The production of beer on a commercial scale depended on a

variety of established male-dominated crafts such as coopering, and engineering trades engaged in the erection and maintenance of grist mills, coppers, fermenting vessels and the steam engines providing power. Many of the general labouring tasks such as turning the maltings, the humping and carrying of hops, sugars and yeast were closely-linked to farm labouring in the early years of industrialisation. At the earliest stages of commercial production brewing was primarily seasonal work, following harvesting of the beer's ingredients. Until improved storage for hops, grains and the beer itself appeared, the farm labourers of Lincolnshire (mostly males) accompanied their carts of barley to Burton to be employed in its conversion into beer. There's no migration today, of course, and little place for manual labour, but distribution of by-products and the disposal of bad beer retain the links with agriculture. Spent hops go to make fertiliser, husks from the mash tuns provide cattle food, and bad beer is fed to pigs.

The Brewing Labour Process

Production is now highly capital intensive, with only seven men per shift overseeing the continuous brewing process. A 4 x 10 hour shift pattern or what some term the 'continental shift' is in operation. Conditioning of the beer is attended by an even smaller number of just five men per shift.

One of the largest concentrations of labour is in packaging: casking, kegging and labelling barrels (canning is carried on at a specialised site in Runcorn). The other, is in the Engineering Department engaged in the maintenance of miles of steam pipes and other plant, employing electricians, fitters, and other engineering trades. Alongside these production workers is a laboratory monitoring quality.

All hourly-paid operatives in production were men, as were all the skilled trades. The process is overseen by a single Brewing Production Manager to whom each shift manager, or 'brewer' reports. These 'brewers' were biochemistry graduates who had further specialised by taking the Institute of Brewing Diploma course as in-service trainees.

Below these were the handful of operatives. It was considered that the most skilled job among them was that of the Panel Operator, responsible for monitoring the computer-controlled process; checking read-outs of raw material feeders, ensuring temperatures of brewing vessels were correct, and the like. This was regarded as the "top manual job", though there's nothing manual about it, in the sense of physical exertion. Neither does it require technical qualifications, as shown by the fact that his Panel Assistant, learned the job by doing it over a long period and could only expect promotion into a "dead man's shoes". This practice of learning a job by doing it over an extended period mitigates against women since their life-cycle pattern, coupled with the structure of the domestic division of labour, is likely to disrupt the long service record needed due to the breaks in paid work to provide child-care. Most women withdraw from the labour force until their children reach school age, and re-enter it at a progressive rate in line with the developing self-sufficiency and increasing school hours of their offspring. From a rate of economic activity for childless women at 93%, it plummets to 31% for mothers of children under school age, and rises incrementally to 68% when children are at primary school between the ages of 5-10, and 81% whilst they are in secondary education between the ages

of 11-15.¹ The 'skill' and status of the Panel Operator's job then resides in his exclusive and unique continuous job experience rather than being based on the content of the work itself. This, of course, ultimately rests on patriarchal structure of gender relations under the domestic division of labour.

One of the most powerful jobs in production was that of the laboratory managers who had the authority to stop production if, in their technical judgement, the quality of the beer was impaired in any way. These were male chemistry and microbiology graduates working two per shift, supported by four ungraded scientific assistants. The only females connected with the laboratory were employed in clerical grades.

As already indicated, by far the largest numbers were engaged in the packaging process; a total of 152 men. 133 of these were younger men doing the most unskilled, boring and monotonous work. Returned kegs are mechanically washed. Wooden casks require more manual cleaning: the old woodwork (bunghole, keystone) is first removed by hand. Labels are subsequently scraped off and they receive new woodwork plus manual descaling if necessary, provided they are otherwise undamaged, or they are sent for more extensive repair in the joinery workshop. Once filled, both kegs and casks are pegged and labelled. Apart from the washing operation, all other aspects of packaging required some manoeuvring of barrels. There was little variation in tasks and the consequent physical strength required to manoeuvre casks, combined with the stamina needed to perform the work

¹See Table 2.6, in Martin, J and Roberts, C (1984)

repeatedly throughout the working day were the prime reasons for regarding this as men's work. Once again, women were only present in clerical grades involved in checking returns, and work-in-progress paperwork.

This male enclave in Brewing shares characteristics with the Electrical Machinery and Earth-Moving Equipment industries documented in the following sections. It is influenced and maintained by the wider sexual division of labour in the labour force as a whole, (see discussion of Hakim's work in Chapter 2) and also by the wider gender division of labour between home and workplace.

There are two ideological strands corresponding to the dual character of the male workforce in brewing. As outlined, there is a primary distinction between technical grades and basic labouring jobs. The technical grades further divide into mental and manual components, with brewers and laboratory quality control staff applying scientific knowledge, and electricians, fitters and the like experiential knowledge and ability gained during apprenticeship, paralleling the well documented sexual bias in education and training.¹ The labouring jobs, however, relied on the physical components of the work to define them as masculine. Between these two extremes sit the Panel Operator and his assistant for, as pointed out, his work was neither technical nor subject to craft apprenticeship. Nor, indeed, could it claim to be physically arduous, but it did share a reliance upon the wider sexual division of labour, as discussed. None of these various aspects of masculinity received special emphasis or reiteration

¹See Holland J (1980:25)

during the interview. The fact of scientific training, apprenticeship, long service or the heaviness of the work were sufficient in themselves to justify these jobs as self-evidently masculine.

Like so many professions and occupations such as baking or midwifery, brewing under domestic production was the province of women. The transfer of brewing knowledge arose with the rise of science in the 17th century when in 1637 tavern keepers were prohibited by royal edict from brewing their own beer, followed shortly afterwards by a tax on domestic brewing introduced in 1643. This restricted production to the local common brewer. These moves were a reaction to the rising concern that drunkenness had become the national vice. The measures were designed to curb outlets. They were particularly directed at ale-wives whose selling of diluted or poor quality beer in false measures was proverbial, on the grounds that paupers, who could only afford poorer quality ale, would thus be protected from their sharp practices.

The concern with the quality of beer saw the appointment of ale-tasters to control it. It took over a century for the transition to centralised brewing as the norm, but the final stages were hastened by the prohibitive cost of fuel to the domestic brewer; a factor also contributing to the demise of the home baking of bread. (Cheshire Life, 1976)

The discrediting of ale-wives coupled with the requirement for capital to produce beer on a larger-scale in specialised premises and to a defined standard, undoubtedly placed control of brewing in male hands. The absence of women as brewers or quality control technicians today can thus

be seen as having its roots in a struggle that took place around 200 years ago, but which still rests on notions of scientific judgement being the province of men. On the consumption side, the drying up of cheap beer removed 'the demon' from the very poor and no doubt boosted the practice of tea drinking among the lower classes. Specifically, the disappearance of small beer excluded children from the practice of beer-drinking. The removal of production from the domestic sphere likewise shifted the locus of its consumption away from domestic settings, to the public house. Like the shifting of so many other aspects of social production into the public sphere at this time, the appearance of women outside the domestic sphere, either to work or play, became tantamount to trespassing upon male territory. Beer-drinking was becoming a masculine activity, and women who interloped in the public sphere of its consumption, like women factory workers, were defrocked of their feminine status. The removal of children from beer-drinking was an important step, since women were often lumped together with children in the social consciousness of the time, and no doubt were deemed to need the same guidance and protection of men from the evils of drink. Interestingly, what started out as a reactionary measure of the upper classes to a general fear of the masses, (all the more threatening with a drink inside them) ended up as a patriarchal practice with working class men being the most vigilant guardians of this particular public sphere. Even today, Working Mens Clubs tolerate rather than accept the presence of women who are effectly excluded from the governing structures of Clubs that make their patriarchal rules. For the historic ruling class women had merely been the instrument of achieving their end to remove drink outside the purchasing power of the very poor, admittedly by fomenting men's fear of female power and male prejudice that viewed women as devious and

dishonest; the contemporary form of the witch. This essentially class action had, however, unintended patriarchal consequences; by establishing drinking as a masculine activity and, by removing the threat of economic independence such female entrepreneurs stood to gain from their market activities, they fortified the material basis of men's patriarchal power in the home: from which men of all classes benefitted.

5.5.3: Electrical Machinery : Stafford

The firm studied is one of the largest producers of Turbine Generators, and also one of the largest companies in Britain. Electrical Machinery is the dominant activity within the Stafford TTWA, accounting for roughly a fifth of all employment. The site visited accounted for about a quarter of this. As Table 4.11 (Chapter 4) shows, this an an overwhelmingly masculine industry.

There was no available breakdown of the workforce by gender, though the Personnel Manager interviewed regarded the prime gender division as that between staff employed in clerical and administration functions and hourly-paid direct workers on the shopfloor; a feature we've already noted for other masculine enclave industries. There was, however, a very small number of female hourly-paid workers concentrated in one section of the production process: 18 women out of a total of 600 on this site.

The firm makes huge turbine generators of the kind used by power stations supplying the National Grid, which typically weigh around 100 tons. All the fabrication of components is skilled engineering work and is done by

time-served men. The cores are built by hand from anything up to one and a half million pieces of lamination and the winding of the copper coil that surrounds it is also work solely performed by men. The only work in which women are involved is in the taping of the coil. Large bundles of copper wire, the thickness of the forearm, and up to 40ft long, are wrapped with insulation tape by hand in a similar fashion to the lagging of domestic water pipes. In contrast to the men's work this was seen as a fiddly job that was not strenuous.

"Now these ladies are extremely good at this and that is where they're employed. Really its the only job that - you might say I'm a bit of chauvinist - but I believe in my heart of hearts that you shouldn't put women to heavy work." (Interview Transcript No. 3)

It was thought that a large part of the work would shortly be done automatically, though some women would be retained to tape 'the awkward parts and the finishing off which must be done by hand'.

Quite apart from the unsuitability of women for heavy work it emerged that the Personnel Manager perhaps regarded other traits he identified with women as more important. These embraced women engaged in shopfloor work, as well as those working in administration and technical support functions. For instance, women were seen as generally less reliable. Several experiences were related to demonstrate this. Women had, on occasions, been introduced to some of the heavier work but 'they don't seem to want to stick it'. And, as if to justify this opinion, the following account was given:

"One of these girls, who is a coil taper and the union rep., is always pushing women's rights and the women's point of view.

She won a battle over me and she was really pleased about it. She got me to put a woman amongst all the storemen. It's very heavy work again, but I'm afraid the young lady only lasted about two months and she decided it wasn't right for her. The environment wasn't right for a woman and so on." (Interview Transcript No. 3)

I asked whether this was due to sexual harassment, but this was discounted on the grounds that her wider experience on the shopfloor would already have discouraged her:

"She was a girl that was used to working on the shopfloor, so it wasn't the male camaraderie that put her off." (ibid)

Of course, this amounts to a tacit admission that sexual harassment of women in this male environment does take place. It is also tacitly understood that sexual harassment is something which the women are expected to endure. Naturally, it is impossible to know what the real influencing factors were, but the way this episode was related was extremely patronising of the female union representative and the Personnel Manager emerged completely vindicated in his original resistance by the outcome.

Other comments indicated that unreliability was thought to stem from a variety of causes. A prime example came to light in the distinction drawn between career and non-career women. Success in being perceived as career-minded and therefore more reliable seemed to rest on behaviour that amounted to a denial of biology or behaving in ways more 'appropriate' to men.

"Our past experience of female engineers, I must say, has not been good. We've had them and their husbands have moved from the area, or they've left to have families. We seem to have lost every one in the way of engineers." (ibid)

This is certainly disquieting for women attempting to enter engineering and technical posts, for the implication contained the last sentence is that one of Britain's largest concerns in the engineering field may be reluctant to take on women in such posts. Since Equal Opportunities legislation disallows probing of a job candidate's plans for having a family, it is all the more likely that married women will be passed over during the initial selection for interview. However, whilst this is a very general point, the fact that these women engineers were constrained from exercising equal opportunities to a career, with all that entails, by a wider domestic division of labour that decrees their prime responsibility is that of providing domestic services and child-care in the home, was an irony lost on this particular interviewee.

The more a woman was able to show she could be 'one of the boys' and display 'masculine' traits, the more she seemed to be perceived as career-oriented and dependable:

"Now, we do have a computer specialist who's a woman. She's very much a *career* lady and I'm expecting we shall hang on to her. We also have a young woman who is a technician. A real *tomboy* - great - the boys love her - smashing technician - smashing girl." (ibid)

This touches on a classic female dilemma, of which feminists are most keenly aware, of modifying their behaviour or accommodating their values to conform to masculine-defined modes of conduct or roles, especially at work. The models for performing hitherto male-dominated jobs fit uneasily with many women's perception of themselves or their ideas of how they would wish to play their role. Some, unconsciously or otherwise, survive a masculine environment by adopting behaviour which, if not turning them

into token men, is at least sufficient to gain the approval of their male colleagues. The resulting model of 'successful women', predicated on an acceptance of male definitions, of course, plays its part in asserting the authority of those definitions and at once aligns the sexes up with the prevailing patriarchal order.

The fact that these definitions and men's right to construct them are important and political rather than personal has, of course, been amply demonstrated recently in the case of Wendy Savage. Challenging the masculine definition of the gynaecologist's role, she was subjected to a vicious and malevolent attack from the male-dominated establishment. The vehemence of the reaction by the British Medical Association attests to the real power residing in the ability to define such roles and, in this case, to expand the scope of their power beyond the gender-constructing limits of the job role to a maintenance of political control over very personal aspects of women's lives at the time of childbirth itself.

So far, in our coverage of coil-taping by the women, we have merely suggested by omission the kinds of attributes that construct the jobs that men do as masculine work. Here again, there are resonances between the nature of the product and the kinds of attribute required to produce it. Throughout the interview descriptions of core-building, coil-winding, and assembly of large components were embellished with a sharp drawing of air through the teeth and accompanied by a grave tone. Be in no doubt: this is serious, 'hard' stuff.

"Our business is a very heavy business; very heavy work. Heavy fabrication. Big heavy machining. Core-building, which

you've gotta be a gorilla to do. You've gotta be real strong - shifting tons and tons of wire. The copper coil might take anything around half a dozen hefty men to lift. The coil itself can be anything up to 5 or 6 hundredweight."(ibid)

This is all very well until you discover that the shopfloor is not the scene of armies of men transporting components out of all human scale in ant-like fashion (or gorilla fashion, for that matter) from process to process. On the contrary, the coil and other large components are handled by overhead lifting gantries, controlled (no doubt they would claim) by the 'heavy' depression of a button on a suspended control console. It is, incidentally, conveniently forgotten that the copper coil that needs hefty men to lift it is wrapped with insulation tape by women. To be fair, however, some aspects of assembly work were clearly strenuous and manoeuvring chains and tackle for some lifting operations was one such example, among others:

"The assembly part of it - it is very heavy work again. Nuts have to be tightened up and they have to swing sledge-hammers. It's very heavy work all the way through." (ibid)

Undoubtedly this kind of work is beyond the physical stature of most women (and some men) and though an average woman might be able to perform the operations infrequently, there is now medical evidence to suggest that women are more prone to Repetitive Strain Injury (RSI) caused by the repeated performance of moderately heavy tasks. RSI, a scourge of male car workers for some years, produces a painful inflammation of the muscle tissues known as tinosinovitis, and is a common and well-recognised complaint for many groups of industrial workers. This is not the point, however. Simple physiological differences, whilst reasonable grounds for expressing a preference for men, cannot justify classifying this work as somehow superior to women's work because it is heavy, but this is

indeed what happens. The argument has a familiar pattern that goes: this work is heavy work: this work is therefore men's work. If it is men's work, then it ranks above what women do. In this particular instance, male claims to skill on the basis of strength are no doubt reinforced by the fact that the majority of these men were time-served skilled engineers, though this was never brought into justifications supporting the distinctions between men's and women's work. The affinity between the socially ascribed masculinity of the work with the seeming biological fact of the male sex appears to be a sufficiently robust association of ideas as to be self-evident, needing no support of such additional justifications.

Nevertheless, this is circumspect because, although there are indisputable biologically-given differences between the sexes that quite logically have a bearing on the sexual division of labour, it is also the case that these 'facts' are socially interpreted: given a social value. Indeed biology itself is socially constructed. It is therefore not a neutral, immutable or natural fact that being built like a gorilla belongs to a higher order of things. Differences in physiology are biological facts, but it is the value-laden interpretations placed upon these facts by gender relations at work that matters.

5.5.4: Earth Moving Equipment : Uttoxeter

As mentioned in our discussion at the outset of this chapter, a prime reason for lighting on this male-dominated industry was the existence of the female-dominated biscuit manufacturing firm in the same area. It therefore provided an opportunity to tease out the complexities of gender construction by making comparisons along several axes. Apart from the obvious

extremes of gendered workforces between the two firms, there's the additional possibility of comparing the ways masculinity is constructed in two very different work environments situated in the same town. It also provides further comparison with the other males enclave industries of Brewing and Electrical Machinery already examined.

Like Electrical Machinery, the actual production of Earth-Moving Equipment is an entirely male environment.

"We're a heavy engineering industry. The prime shopfloor occupations are welding, fabricating, machining (fairly heavy) and assembling. Labour on the shopfloor is entirely male. We have trucks that carry heavy components about, but very often there's a manual element ... it's a bit of a man's world down there in the factory." (Interview Transcript No. 4)

Again, the chief sexual division was between direct production and administrative functions, but sales and technical back-up staff, were qualified engineering graduates who were men. This firm considered this to be a simple reflection of the wider gender pattern in higher education where female engineering graduates are few and far between, and over which the Personnel Manager felt the company had little influence. The firm had recognised their scope for increasing women in technical grades through their apprenticeship scheme, but the first one arranged had fallen through at the last minute.¹ All apprenticeships thus continue to be held by boys. The interviewee was not happy about this and suggests that entering an all male environment might be too formidable a prospect for young women:

"It's sad. We would like it to be different, but it is a man's world in heavy engineering." (ibid)

¹The point where 'human capital' does begin to differ for the sexes, as argued in Chapter 3.

This particular Personnel Manager was very active in the local business community and proved to be a very knowledgeable informant about the Rubber and Pottery industries. He drew upon this fund in pointing up the differences between these and heavy engineering:

"We're a heavy industry, in contrast with the pottery industry. We discuss some of our problems. Very, very different; they have high absenteeism, we have very low absenteeism and the fact is it's known nationally for whatever reason, that absenteeism where there is high female incidence tends to be that bit higher." (ibid)

I ventured to suggest that this probably (sic) stemmed from women's responsibility for child and other care and the lack of workplaces creches, for instance, rather than women being intrinsically unreliable. As we saw earlier in the case of Electrical Machinery, the domestic division of labour underpinned the distinction between career/single/reliable women and non-career/married/unreliable women, that imposed occupational boundaries on women's work.

This interviewee offered a more sophisticated analysis of the problem. He agreed that absentee rates were not a reason for not employing women, but pointed out that there was little pressure or incentive to promote equality of access to employment:

"The real difficulty is that when a company has no difficulty in recruiting the calibre of labour that it wants, then they're not going to enter into solving problems that don't exist. Now that doesn't help the position of ladies that want to have work, but companies increasingly have had to be more and more commercial and that's true of this company." (ibid)

This is the clearest indication yet why, despite the increasing presence of women and especially married women, in the post-war labour market, their structural position within it has remained unaltered. Male full employment in this period and the high unemployment of the ensuing recession has ensured that women's labour, particularly of those most heavily engaged in domestic labour, is attractive in a much narrower set of conditions. In the highly competitive climate engendered by the recession, the requirements of labour and the organisation of its use have changed (as outlined in Chapter 2).

Absenteeism, as the quotation above suggests, is seen as a negative attribute of labour working against 'being commercial', and, as we've seen, this is just one among an array of attributes associated with women's labour that are regarded as making for unreliable workforces. As many of the case studies show, this unreliability, particularly as manifested in absenteeism, comes to be seen as intrinsic to women themselves - as part of their nature - rather than reflecting patriarchal relations under the domestic division of labour. As a 'natural' attribute of women, of course, it comprises one element in the construction of the female gender which may be mobilised in justifications supporting the sexual division of labour at the workplace, as well as structuring the wider social division of labour along gender lines. This touches on a theoretical issue discussed in Chapter 3 worth a brief aside at this point.

In an intensely competitive environment for capitalists and a climate of high unemployment, why is it these conditions have produced ever larger numbers of women workers, especially married women workers, for surely

this kind of climate favours male employment? Why aren't women's numbers in the workforce ebbing during the recession as the 'reserve army' theorists would predict? Certainly the last quotation, in remarking upon the absence of pressure to attract women workers, appears to favour their explanation.

As we saw in Chapter 2, one of the most visible aspects of restructuring since the war has been the increase in part-time work. Lower paid, and enjoying less protection under employment laws, part-time work offers one way of achieving the cheaper and more flexible workforce necessitated by a more aggressive and volatile business environment. The rise in part-time work, of course, has been a phenomenon almost exclusively associated with married women. This is a classic illustration of the way capitalism and patriarchy operate in unison. Patriarchal domestic social relations give rise to the absenteeism seen as an attribute of women themselves. Part-time work by married women circumvents the problem absenteeism presents for capital, without undermining patriarchal relations inside or outside the relations of production. As lower-paid and often lower-skilled workers, women's part-time work offends no one - neither their male workmates, the capitalist that employs them nor the individual men they service under the domestic division of labour. Whilst women's paid work has increased rapidly, their structural position as lower-paid and lower-skilled therefore remains a subordinate one in the labour force as a whole. This position, together with the disparity in earnings it maintains, forms the familiar loop that feeds back into patriarchal relations under the domestic division of labour to assert the material basis of men's power in the family that rests on women's continued economic dependence upon them. Women's relation to

production (that is, to the labour market) is therefore an element structuring relations **within** production.

It was this particular interviewee who acted as informant for the rubber and other local industries and he used his insight to highlight his sketch of the Earth-Moving Equipment industry. One very interesting aspect of these references was the apparent differences in the way masculinity was conceptualised among the various industries. Attributes like, say, the heaviness of the work, seemed to conform to a continuum whose poles were fixed by the type and range of industries within the area. Industries and their corresponding male workforces in particular appeared to be positioned on the scale according to a hierarchy of masculinities. The positioning in the hierarchy was composed of a constellation of features of the work and its position relative to either: other men's work, or women's work: a set of coordinates which together pinpointed the positional value. Here's the picture he built up.

First, referring to the heaviness of the earth-moving equipment business and therefore the masculinity of the work, the primary comparison was with the female-dominated pottery industry - as he characterised it:

"Now the pottery industry has a requirement for people to be very dextrous and that very often is an attribute that the ladies have and the men don't have. When you look at who Wedgwood's actually employ there's a very high incidence of females amongst their painters and decorators." (ibid)

He, also, was very surprised to learn that the industry as a whole is in fact narrowly dominated by men, but he agreed that his analysis was a reflection of the position in the tableware division and that the other sub-divisions

were more male-dominated. It is nonetheless interesting to note that, from the stance of a 'masculine' industry, he chose the female-dominated aspects of pottery production to characterise the entire industry, whereas, remember, our man in tableware chose masculine-dominated processes in other divisions of the pottery industry to differentiate between tableware and tiles. In other words each of these respondents chose the local example in sharpest contradiction to their own situation.

So, the contrast in Earth-Moving Equipment is between dextrous females in pottery and heavy work performed by men in engineering. There were other industries similarly male-dominated by virtue of the heaviness of the work, though this was stratified by reference to other 'peers' within this group of heavy industries, though comparison with women's work was the tacit baseline.

Drawing out the distinctions, he goes on:

"If you go to Michelin, that's *relatively* heavy - the rubber industry is *relatively* heavy and their factory is male-dominated. Creda are a *lighter* industry and they have very much a mixture [of men and women]. They're mid-way between the pottery industry and ourselves where a lot of their work is *light* work but engineering, and particularly the *heavier* side, does not attract many females."(ibid: my emphasis)

The italicised parts of this quotation are important for the absolute and relative terms he uses in effect reflect how the stratification of industries is arrived at: the absolute term 'light' alludes to women's work inside Creda, and the relative terms distinguish the hierarchy of masculinity corresponding to a relative scale of heaviness. The masculinity of work inside Creda appears, from this account, to take its reference from the detail division of labour where the use of the absolute term 'light' to describe women's work

then allows the men who work alongside them to be regarded as doing relatively heavier work even though the industry, of which Creda is a part, is most definitely considered lighter work than other male-dominated industries in the North Staffordshire area, such as the rubber and earth-moving equipment industries. These heavier industries seem to rely on more positive assertions unconnected with the detail division of labour and with greater reference to wider national ideologies of masculinity. Men's work inside Creda, on the other hand, is couched in more negative terms; it is not light work, i.e. it is not women's work, and these differences within the detail division of labour have more salience for constructing their masculinity than they derive from their lowly position in the masculinity hierarchy that is constructed by reference to other male-dominated industries in the area. Clearly men working at Creda would find difficulty in classifying the masculinity of their work in the same terms as men producing rubber tyres or earth-moving equipment nearby:

"I would say, quite unconsciously that the hierarchy would be if you looked at our industry, the people to whom we sell, they tend to be fairly rugged, construction-type guys. As you get into places like Creda - of course, Michelin would be next to us in terms of their male-dominated situations - Creda would probably be about middle distance, with the pottery industry generally applying greater emphasis to females." (ibid)

Men's work in the pottery industry is, like Creda, constructed by reference to the heaviness of the work relative to female-dominated areas of work within the technical division of labour within firms, and with reference to the social division of labour of the industry as a whole:

"Bathrooms - I would think you're talking about more men there - more male-dominated for, again, the reason that there's a fair amount of heavy work involved in humping toilets and sinks around." (ibid)

As was outlined in Chapter 1, we shall be leaving the comparison of the two regions until the final chapter. What we can say here, briefly, is that there are clear differences and continuities over time within the Potteries. There are also many similarities and contrasts between this picture and the one now about to unfold for the Cotton region.

Chapter 6

The Historical Cotton Region and Contemporary Case Studies

6. THE NINETEENTH CENTURY COTTON INDUSTRY

6.1: THE GENDER DIVISION OF LABOUR UNDER THE DOMESTIC SYSTEM

During the early nineteenth century Lancashire had a well-organized and extensive domestic 'putting out' system. Merchants supplied raw cotton through the agency of the 'putter out' to domestic family production units. The male head of the household delivered finished cloth to the 'putter out', collected fresh materials and additionally negotiated rates for woven pieces at a local collection point.

6.1.1: The Domestic Labour Process and Technical Division of Labour

Andrew Ure in his classic, *Cotton Manufacture of Great Britain*, of 1839 depicts the typical division of labour:

"The workshop of the weaver was a rural cottage, from which, when he tired of sedentary labour he could sally forth into his little garden [to] tend its culinary productions. The cotton [...] to form his weft was picked clean by his younger children, and was carded by the older ones assisted by his wife, and the yarn was woven by himself assisted by his sons. When he could not procure within his family a supply of yarn adequate to the demands of his loom, he had recourse to the *spinsters*¹ of his neighbourhood. A good weaver could keep three active women at work upon the wheel spinning weft" (1839, p191-2 cited in Pinchbeck 1981:114)

¹'Spinster' was simply a woman who spun yarns and could refer to single and widowed women who relied on such employment or wives and daughters of husbandmen and craftsmen who could spin in spare moments. (Pinchbeck, 1981:114)

Spinning was exclusively the occupation of women and children though wives might also help at the loom.

There's occasional reference in many sources to suggest that these domestic production units did supplement income with home-produced vegetables, but by the early nineteenth century these families were already very reliant upon wage labour with insufficient resources to supplant wage income altogether.

Whilst payment was in a wage form, however, the domestic family as a whole cannot be described as true wage labour. The male head of household stands in a contradictory position under the 'putting out' system. Whilst he is a wage labourer in the sense that he receives a wage and the product of his (and his family's) labour is appropriated in exchange by the merchant, the male head of the domestic production unit has control over family and extra-familial labour and, in the wage paid to him for finished pieces, appropriates their surplus. It is he who organizes the production unit, who has control over the size and pace of his workforce (familial and extra-familial) and who sets the wages of women outside his family whom he hires (if he opts to do so) though presumably he could simply intensify the effort of his own family members to some extent. Where he does employ women spinsters from outside, it is he who determines who will work and for how long. For wives of farmers or craftsmen, who span as a by-employment, dependence on the handloom weaver's work was perhaps not so great, but local widows and other women outside the domestic family production unit were probably extremely dependent on the the handloom weaver for their livelihood and, as

such, under his patriarchal control. As the disposer of the finished piece of cloth to the 'putter out', he has control over the distribution of the 'family wage'¹ and is in a position to appropriate the surplus created by women spinners inside and outside his family. As he stands in relation to the merchant, so women and children engaged in the domestic production of cotton textiles stood in relation to the male handloom weaver.

The domestic system then already contained the embryonic form of the distinction between capitalist (merchant) and wage-labourer (domestic worker). Essentially the factory system that was soon to emerge became the 'appearance' of what had for a long time been in essence.

But it was not only these class relations that developed during the industrialization of cotton manufacture. Gender relations too had to be reshaped in the transition from domestic to factory system.

6.2: TRANSITION FROM THE DOMESTIC TO FACTORY SYSTEM

6.2.1: Spinning

In cotton textiles production spinning was the first process to be mechanised in the 1770's, though Hargreaves' small jennies could still be worked inside the cottage to produce weft. Arkwright's water-powered frame, capable of spinning finer counts of thread of adequate strength for warps, that until now could only be achieved by hand technology, was the first invention requiring a shift in the organisation of production to the factory. However, a dual system of factory spinners and domestic weavers ran in parallel producing warps and wefts for domestic weavers right up to the turn of the

¹At this time meaning just that: the family group's income to which all family members had contributed.

century when Arkwright's improved frame of 1775 (incorporating carding and roving processes) and features of the jenny were combined in Crompton's spinning mule. The mule was successively adapted from hand to water power and was finally driven by steam to become fully self-acting by 1830.(Daunton 1983:24)

The demise of the domestic system in cotton textiles was, however, a protracted affair. Handloom weavers enjoyed a boom period coping with the vast increases of spun yarn produced both by improved cottage jennies and later inventions in the factories. Even some thirty years following the introduction of the power loom, according to Pinchbeck, handlooms outnumbered those driven by power (1981:117). Spinning cotton became men's work, as early as 1788 at the time when the larger jennies began to be operated in small local workshops. (Pinchbeck 1981:148)

Factory mule spinning was a male preserve from the outset, but this was not simply because the developing spinning technology required power sources that could only be provided outside the domestic setting and that this public domain was automatically a masculine one, as Pinchbeck seems to infer:

"At first the machine [jenny] was small, easily imitated and inexpensive and many of the spinners were able to purchase and install them in the upper rooms of their cottages. A few years later, when the number of spindles was considerably increased, the jennies were gathered into small workshops and worked by men, and after the appearance of the mule in 1779, women spinners were soon superseded." (1981:148)

The spatial division of labour was not, as it is so often claimed, decisive in overturning the established gender division of labour from women to men spinners.

Pinchbeck claims the larger jennies required 'the strength of men' and certainly the mule spinning machines that succeeded the jenny were 'monopolised by a new class of men spinners' (ibid). Whilst Pinchbeck is correct in attributing the monopolisation of mule spinning to the fact that 'heavier machines required the strength of men' and this became 'highly skilled work', the shift in the sexual division of labour was in fact already accomplished under the domestic system.

Mule spinning, according to Lazonick, (1979:233) was, in its earliest stages of development, performed on a 'putting-out' basis until the late 1780's when mule spinning sheds arose. What seems to have been overlooked by many historians, (including Pinchbeck) in their emphasis on change, (and, perhaps following Bythell's (1983:18) critique, their tendency to focus on the dramatic and conflictual) is that the shift was not absolute and unidirectional. In the case of cotton, historians seem to have assumed (I can find no authority quoted) that because jennies and frames became established in factories once they were harnessed to power sources, then the later technical development of the mule was also operated at the outset in the workshop or factory. Whilst the mule was logically the hybrid technical successor to the frame and jenny, it does not follow that a spatial and social organisation of production can be imputed: that is to assign an independent and autonomous role to technology. Such technological determinism could, in the case of Pinchbeck, (first writing in 1930) have been avoided by reference to the same evidence published in 1831 from which Lazonick supports the following account:

"In its domestic industry phase, mule spinning acquired the status and characteristics of a craft. Factors such as strength (in pushing the carriage of the mule back and forth), skill in spinning [and] to maintain and even build the mule, the capital required to buy or construct the machine, and the uncertainty of the market for fine yarn... all served to restrict entry... As a high-paying occupation, as well as one which could be quite strenuous and which involved the supervision of assistants, domestic (and then factory) mule spinning became predominately a man's occupation." (1979:233)

The proto-type mules, therefore, underwent their trials at the risk and expense of individual wage-earners under the 'putting-out' system. The hand mule, operated in the cottage, completed the demise of women's traditional roles within the domestic system's division of labour - preparation, carding, roving and spinning on larger jennies had previously undergone mechanisation and passed out to factory power-driven production, leaving small jenny or hand spinning alone. The hand mule combined all these processes and became men's work, so that every stage of cotton production was now dominated by men, either at home under the domestic putting-out system [preparation processes and warp and weft spinning (hand mule) and weaving (handloom)] or in the factory and workshop (spinning on larger jennies). As Pinchbeck observes:

"... the only class of women spinners left were the unskilled workers in the new factories built to house Arkwright's frames." (1981:148)

This small niche in the division of labour was a precarious foothold. Once the self-acting mule began operating in factories, incorporating the process hitherto accomplished on the frame, (in factories) or hand mule (domestic) women's traditional role as spinners was completely usurped by males. Contrary to many historical (and recent feminist) accounts this was not a sudden up-ending of the sexual division of labour occasioned by a separation of the home and workplace. Women had been squeezed out of

spinning at home within patriarchal gender relations on the patriarchally justified grounds which assumed that they were insufficiently strong to carry out the heavier work of hand mule spinning in the cottage and unfit to supervise the labour larger mules required, as well as lacking in the technical know-how needed to build and maintain machines.

6.3: THE DIVISION OF LABOUR UNDER THE FACTORY SYSTEM

Spinning employment in factories was organized on an internal sub-contract basis. The mule spinner was employed directly by the manufacturer and paid by the piece. This marks no departure from social relations under the 'putting-out' system other than that the overlooker (the putter out's successor in the factory) now has closer scrutiny over production on a day to day basis; the element of domestic production previously *relatively* unregulated by the merchant capitalist. But even this was not a radical change; the spinner forfeited control over the pace of work within the boundaries of a week to direct scrutiny and control over the length of his own working day but he retained direct supervision and control over the working day of his piecers. Piecers were hired and paid by the mule spinner on a time rate. Factory spinning was typically composed of master (male) mule spinners who operated the mule assisted by a 'big' and a 'little' piecer, who performed supporting operations; principally the tying of broken ends of yarn (a perpetual problem) and oiling and cleaning of the machine and its surrounding area. As Samuel points out, developing technologies such as the self-acting mule still depended heavily upon hand operations since: "the [mule] depended on the nimble fingers of the piecers" (1977:46). Piecers were commonly members of his own family, though not necessarily so; extra-familial labour in part or exclusively recruited for piecing appears to have been mainly child labour, at least during the initial

period of factory production. (It was not until later, with the establishment of the spinners craft position that progression of big piecers into the craft created a blockage that resulted in young adult men being commonly employed as big piecers).

Gender relations between workers in early factory spinning production are thus either based upon patriarchal authority, in the case of familial labour recruitment by the spinner, or paternal authority where extra familial child labour is employed. This latter was mediated by parental authority. The wages of extra-familial child labourers were often paid directly to the parent; presumably the father, though this is nowhere explicit.

The social relations of production under the early factory system were a reflection of relations under the domestic system. Males, as heads of households retained their ability to appropriate the surplus of their own family members (wives and/or children) directly or indirectly. They could do so directly by virtue of being mule spinners employing their own family, or indirectly as the recipient of their offspring's piecer wages paid by the spinner.

Perhaps more important and new under the factory system, was that patriarchal control over whether women family members worked outside the home now passed into men's hands. Under the domestic system the male head of household handloom weaver could not dispense with the assistance of his wife and children who prepared the yarn for the loom as he typically needed 2/3 women spinning to provide sufficient yarn. The family wage could not be received or appropriated without their indispensable labour. At

the same time as women and children had the potential for direct access to an individual wage, male spinners in the factory (like the handloom weavers under the domestic system in relation to extra-familial spinster contracting) now gained some control over access to paid work outside the home for members of their own family. Women, it seems, could only enter factory spinning as piecers sub-contracted by 'master' spinners - within patriarchal authority relations: i.e. as wives of spinners, since there's no evidence that extra-familial adult women were so employed, nor of adult female piecer wages being paid to non-spinner husbands.

This material relationship formed one of the bases of patriarchal authority within the home, for although wife piecers were formally paid a wage by the husband, in practice they may never or rarely have actually received it.

Adult male spinners, therefore, did not forego their claim to the surplus produced by familial or extra-familial labour that they had enjoyed under domestic production. Although capitalist social relations implied the individuation of wages, control of it was not a necessary corollary. The gender division of labour and relations within the technical division of labour within the workplace were patriarchal in nature. In mule spinning men thus retained control over access to paid work for women and control over their surplus labour against the prevailing spatial gender division of labour between work and home arising out of capitalist development. This also gave them a continued material base for patriarchal authority within the home, despite the fact that women went outside it to work. It was these relations within the workplace in the control of access to paid work through sub-contracting that also contributed to the shift in the subsistence norm of a

living wage from one signifying a family group's income to the ideal of an adult male breadwinner, identified by Seccombe (1986).

6.4 THE TRANSITION OF DOMESTIC WEAVING TO THE FACTORY SYSTEM

As mentioned earlier, factory spinning and domestic handloom weaving ran in parallel for some time. Between 1800 and 1830 male handloom weavers enjoyed an unprecedented boom coping with the enormously increased output of spun yarn from the factories.

It was mainly older men who remained at home performing their traditional role as handloom weavers, and sons who made the transition to factory work as mule spinners, depriving the domestic production unit of the traditional male supply of weaving labour. Expansion in the demand for output from the handloom therefore began to be met by women who, by now, had no spinning employment within the home. (Bythell 1969:42)

As old male handloom weavers passed on, and sons were no longer apprenticed at the loom, weaving gradually became constructed as women's work within the domestic production unit.

The arrival of power looms worked in sheds gradually eroded domestic weaving production. Yet the earliest power looms could not accommodate 'fancies' (finer weaves) and these continued to be produced under the domestic system. But technical improvements progressively shifted the balance between the factory and home. By 1850 power loom weaving was fully integrated into the factory, and worked by women.

Like the male mule spinners, the gender construction of weaving as women's work was accomplished inside the domestic production unit as part of patriarchal gender relations. Men could claim much higher wages from spinning outside the home in factories than from domestic spinning or handloom weaving. It was their absence from domestic production that created the conditions for women to enter weaving under the instruction of the old men left behind. Simultaneously, legislation restricting child labour prevented master mule spinners from sub-contracting them as piecers. The social division of piecing into wives as 'big' piecers and children as 'little' piecers thus changed into a predominantly sexual division between adult male big piecers, who progressed to the now established craft of spinning, and women as 'little piecers'. The boom in domestic weaving coupled with the later arrival of power loom weaving no doubt provided more lucrative employment for women outside spinning and mule spinning became an entirely male occupation.

The establishment of the mule spinners skill and the resulting high wages men could command, meant the emergence of power loom weaving held little attraction for men, and their domination of the spinning industry restricted the supply of male labour to the industrialised production of woven cloth. Capitalists may have used the pools of skilled women weavers available to enter wage labour, but the reversal of the gender division of labour in cotton production that appears to arise with the capitalist spatial division of labour between the home and workplace was achieved under domestic patriarchal gender relations. Even so, it was in the factories that weaving began to be constructed as synonymous with feminine attributes. As one manufacturer later told a Parliamentary

Committee¹ women were preferred for their smaller hands that allowed them to handle and twist the weft with "greater dexterity than men". Seemingly such dexterity extended to women weaver's lips, as they 'kissed' the shuttle to draw the weft through into the bobbin! (Samuel, 1977:46).

6.5: WEAVING UNDER THE FACTORY SYSTEM DURING THE NINETEENTH CENTURY

Power loom weaving was exclusively female work, but like spinning, was overlaid with patriarchal authority within the weaving shed. There was no sub-contracting system, but weavers relied heavily upon the assistance of the male tackler to set up and maintain their machines. A stoppage meant a loss of piece earnings and livelihood depended upon the maintenance of good relations with the male tackler who oversaw production. Tacklers thus had some erratic material control over women lives but their patriarchal authority more importantly rested upon male violence. The historical sources are replete with the most dreadful tales of brutality in the tackler's treatment of women in the weaving shed². It was the male strength of the tackler, or overlooker as he was sometimes called, that simultaneously constructed tackling work (lifting of heavy warp beams onto the loom and mechanical maintenance and adjustment of looms) as men's work and formed the basis of his patriarchal authority. Tackler's not only wielded this strength in the form of physical violence but physical violence also underpinned attempts at sexual harrassment, against which women in Lancashire strongly resisted. Whilst such ill treatment and abuse seems to have been effective in excluding women from certain occupations

¹Report of the Committee on Women in Industry (1919), Cmnd 167, Appendices and Summaries of Evidence, p79.

²See Joyce P (1980:100) and Pinchbeck (1981:195) who remarks that such cruelty was merely the reflection of the behavioural norm of the times toward women and children in the home.

elsewhere, as Lambertz argues, Lancashire women's long tradition of work alongside men under the domestic system and their high factory wages combined to guarantee their claim to paid work outside the home:

"The woman cotton worker faced with sexual harrassment may have found conflicting pressures on her, but the prevailing social solution was not for her to withdraw from the wage-labour force or factory employment." (1985:43)

The failure to influence and enforce the wider gender division of labour between home and work in keeping with the prevailing ideology was not total, however. Tacklers had a pivotal influence on women's waged work as weavers. As Savage (1985) shows it was tackler's, through their local contacts in "pubs, clubs and church" who assessed the local supply of labour and who recruited women weavers:

"In short, the labour market was mediated by male contacts, even though it was female labour being offered for sale."
(1985:182)

As Savage points out the most ready and easily assessible supply was often the overlooker's own family members (ibid).

In nineteenth century Lancashire the capitalist spatial division of labour between home and work was in itself insufficient to maintain patriarchal authority over women. The long tradition of women's work alongside men in producing cotton textiles under the domestic system made their contribution difficult to deny and, as the highest paid female workers of the time, women themselves were convinced of their legitimacy as wage workers in their own right, as were their families of the benefits of their paid work (McKendrick, 1974:186). All these factors combined to shield women wage workers from local and national attempts to secure patriarchal

authority through the *breadwinner's* family wage that materially reinforced the separation of the two 'spheres'. Instead, in places like Lancashire and North Staffordshire, gender relations had to be re-shaped and reimposed within capitalist production relations. The way this occurred in the two regions was in many ways similar and in some respects very different.

In Lancashire the pattern of patriarchal authority and gender relations we documented for the domestic system in many ways carried over into workplace. Firstly, in both the spinning and weaving branches of the industry, men retained some control over women's access to paid work: in spinning through the internal sub-contracting system, in weaving by virtue of the overlooker's role in recruiting women weavers. Men might have had to relinquish their influence over **whether** women did paid work outside the home to capitalists, but they could still determine **which** women worked. Secondly, they had material control over the levels of women's wages either directly through sub-contracting, as in spinning, or indirectly by having control over the weaver's productivity and therefore piece wages; the overlooker's promptness and accuracy in 'gaiting up' the loom, making sure it was properly adjusted and keeping beamed warp supplies flowing were crucial to the level of weaver's wages. Thirdly, much of their authority was underpinned by actual or threatened use of physical violence and sexual harrassment. In these respects, and coupled with the fact that these gender relations were also familial, gender relations did not undergo a massive transformation with the industrialisation of cotton textiles manufacture. Even so, whilst men had successfully reimposed patriarchal authority relations inside the workplace, the very fact of women's paid work as the established norm, especially in Lancashire, undermined the notion of the

male breadwinner and therefore the basis for men's authority under the domestic division of labour. It was this that so outraged the morality of the time.

In the pottery industry the broad gender division of labour and gender relations that arose from capitalist development between home and work - i.e. the spatial division of labour along gender lines, was mirrored in the physical layout of the potbank itself. Women, closeted off within their own discrete spaces within the painting workshops, did not so glaringly flout the prevailing ideology or morality as 'ladies'. Other women in the potbank who worked alongside men had clearly trespassed to the 'wrong side' of spatial divide within the potbank and locally they were subjected to the same sort of scorn that was usually reserved nationally for their sisters in Lancashire. Like them, great attention was paid to their appearance, and other features such as their uncouth manners compared to the ideal of femininity as the 'angel in the house'. Unlike women in the cotton region, however, women pottery workers were nowhere near as well paid, and thus did not provoke the same national interest in their consumption patterns in disposing of their independent wages. In this they less blatantly contradicted the prevailing national construction of femininity and the growing norm of the male breadwinner's wage. There was consequently less threat to patriarchal authority inside the home and thus presumably less need to reimpose patriarchal authority within the workplace itself with the same intensity as seems to have happened in Lancashire.

6.6: The Contemporary Cotton Industry

Unlike the Potteries, the historical area of the cotton region is no longer defined by its regional specialism in cotton production laid down during industrialisation. As we shall document in the following two sections, the industry has shrivelled to be representative of only a fraction of the area it once dominated. In the case of spinning, production now centres on Bolton, whilst Nelson & Colne represent the core of weaving activity. In the region formerly dominated by the cotton industry there are now several industries that characterise its employment structure. The procedure for selecting case study industries and firms follows that outlined in Chapter 4.

Before moving on to document the case material, it is important, I think, to state that these interviews were carried out prior to those in the Potteries. In the writing up there are slight differences in treatment of the two regions, purely because the initial work in Lancashire was a period of refining my own interview techniques. It was also a learning experience in which many new themes emerged from the first set of cases that influenced the later interviews in the Potteries. Whilst the basic structure of the interview remained consistent throughout, the emphasis and development of certain aspects of it changed with increasing knowledge. With hindsight this points to the desirability of pilot studies, though expenditure on these may well have limited what could have achieved in the final fieldwork, by narrowing the range of cases that could be studied. As things turned out, the pilot results would not have had a substantive effect on the kind of questions I was posing and consequently the work has not unduly suffered from the omission of a pilot study.¹

¹Novice researchers take note. Things could have been very different. Crucial discoveries requiring a radical change in the nature of the questions the fieldwork addresses could have appeared very late in the day when case studies were already well underway.

6.6:1 The Textiles Industry Today: Cotton Weaving

Preparation

Yarn arrives from the outside spinner on cones or 'cheeses' and undergoes different processes dependent on whether it is to be used for warps or wefts.

Warps

The warping process is further differentiated by the yarn fibre type. Man-mades (sic) require no sizing (coating of the yarn by drawing it through a bath of liquid 'size' to give it greater strength). These fibres are dry-taped whereas natural fibres are sized or wet-taped. The 'taping' operation is essentially arranging the warp threads on a roller or beam in readiness for fitting onto the loom.

There is a strict sexual division between wet and dry taping. Wet taping is regarded as heavy work and is carried out by a male taper with the help of a labourer. However the heaviness of the work is not the sole justification for preventing women doing the job. The tapers belong to a separate union and the practice is restricted to its members. One woman weaver interviewed described the jobs she could do in mill:

"The only jobs I can't do are wet taping [amongst others]. That's because the union won't allow women in the Union and you can't be a wet taper unless you're in the Union. I can do dry taping... with wet taping the tape goes through the sizing... you have a labourer to help. On the dry taping it doesn't go through the size, and you've no labourer, so you're doing as much of the heavy work as on wet taping... it's because the Union won't let women in. They say it's because it's heavy work, but that's rubbish... it's because they won't let you in the Union." (Interview Transcript:CC)

The fact that male wet tapers have a labourer assistant to render the heaviness of the wet process equivalent to that of dry taping completely undermines the notion that it is heavy work, and this is transparent to other sections of the workforce, as the above quotation shows.. The patriarchal practice of the all-male Tapers Union by excluding women because they are women determines the sexual division of labour. It is probable that, even if the Union were to admit the spuriousness of the strength argument, they would point to the supervisory role of the taper as justification for their superior capability to do this work. This touches upon a major aspect of gender construction taken up in the final chapter. As the case studies progressively unfurl it becomes more apparent that the objective conditions and content of work do not determine the gender divisions within the technical division of labour. Crucial in many cases, however, are differences in the work men and women do. Irrespective of the superficiality or trivialty of these differences, these are socially precipitated into differences of magnitude out of all proportion to the objective situation.

Weaving

Following the beaming and before weaving can commence there are several procedures involving various ancillary categories of workers. First, the machine cleaners, oilers and greasers (labourers) service the loom. The Overlooker or Tackler then sets the loom, after which the Beam Gaiters arrive to set the beam (a roller wound with warps) in the loom. This involves lifting the beam onto the loom and either knotting the warps 'back at loom' (by Knotters) to existing ends where continuous production of the same cloth is involved or, when it is a new cloth, threading the warp¹ through the heald (which moves vertically to lift or lower the alternate warp

¹The singular noun is used to describe what in reality is a plurality of warp threads or 'ends'.

ends, separating them to form the 'shed' through which the weft is carried by a high-speed rapier - formerly the shuttle). This last job is done by threaders. The overlooker re-checks the 'gaiting' and weaving can then commence. Other labourers 'doff' (remove) finished rolls of cloth, which go to the 'Cloth Lookers' for inspection.

The Gender Division of Labour:

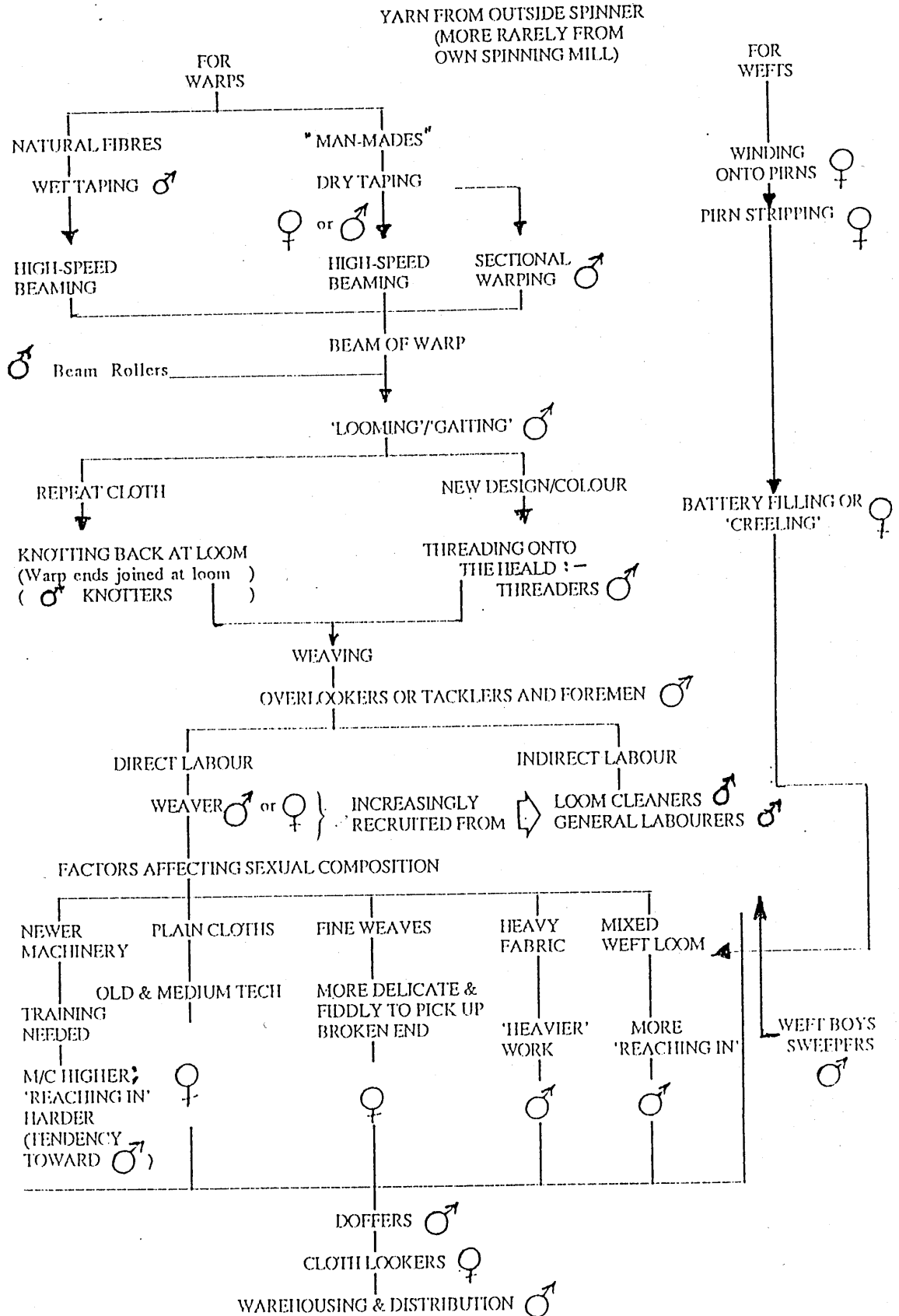
Overlookers, Beam Gaiters (knotters and threaders) and general labourers such as weft carriers, doffers, sweepers and warp wheelers are exclusively men. Explicit justifications for the masculinity of the work emphasize lifting components (gaiters and general labourers) or mechanical know-how and judgement (overlooker). Despite the fact that some of these jobs clearly require dexterity, particularly by knotters and threaders, this never enters justifications for it being men's work. Weavers can be either males or females, but are likely to be males in the future, of which more in a moment.

The weaving industry, as we noted earlier in Chapter 4, is narrowly dominated by men and this, in part, is accounted for by the concentration of males in the ancillary and overlooking occupations. However, weavers themselves are nowadays split roughly equally between men and women. This sexual division has primarily arisen directly out of the historical prohibition on women working nights. Despite changes in the legislation, the force of custom and habit means that most firms still regard the night shift as the men's shift and the day shift as the women's shift. Like many other case studies, this sexual differentiation in shift patterns has the effect that women doing equal work to men do not do work of equal value in the sense that earnings gaps between the sexes are maintained through the shift

premiums for night-working. The following diagram (Figure 6.1) outlines the technical and sexual division of labour within the firm.¹

¹There may be slight variations between firms.

Figure 6.1: The Technical and Sexual Division of Labour within Weaving Establishments



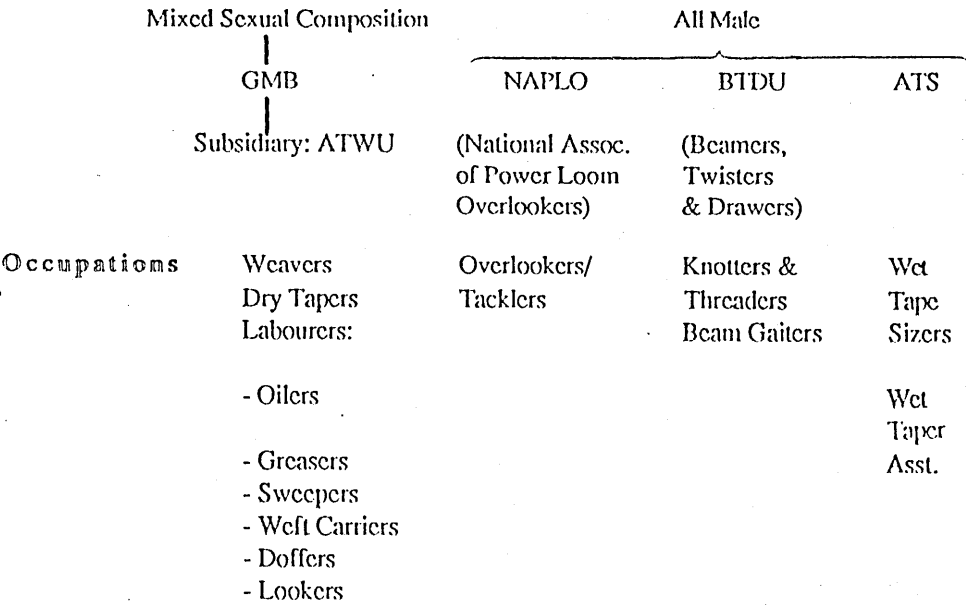
However, as indicated, weaving is increasingly likely to be an all-male occupation, despite the fact that women can now theoretically work the night shift without restriction (other than that safety and health considerations dictate there should be at least one other woman present and that separate toilet facilities exist - provisos that, however reluctantly, accept that women's working lives should accommodate male violence and sexual harrassment). The removal of legislative barriers to women's night work will not effectively alter the sexual division of weaving itself as an occupation because it is becoming a fairly widespread practice for weaving to be restricted to entry routes that pass through labouring jobs or jobs with a labouring content, some of which are beyond the physical capability of most women (and some men) but all of which are expressly linked to notions of male strength.

Whilst lifting gear does remove the heaviest elements, our female weaver interviewee accedes that some labouring would still be outside the scope of most women. On this question she is a credible informant for she distinguishes between objective attributes and ideological constructs and alludes to the importance of knowing the difference in gender struggles at work. She herself had succeeded in becoming the first woman to work the night shift as a weaver among 61 men so she has demonstrated that she will question patriarchal practice:

"Women certainly can't do the labouring ... it *is* heavy. Women are not physically strong enough... they're stronger in other ways but not physically... because a woman *is* built differently. I wouldn't argue a case that isn't justified because I'd lose credibility." (Interview Transcript: CC)

In some cases these notions could potentially be contested within the union itself. As the diagram below shows (Figure 6.2) weavers and some general labourer categories share the same union. Other areas of labouring could well be disputed with the other unions involved.

Figure 6.2
UNIONS REPRESENTING TEXTILE WORKERS
IN LANCASHIRE



However, the three smaller all-male unions are infamous for their practice of only allowing males to become members, thereby securing the occupations they represent as male jobs. We have already quoted one woman weaver's statement about the sexist practices of Wet Tapers. The Tacklers Union (NAPLO) has also been challenged by both the Equal Opportunities Commission and the Race Relations Board for effectively closing off membership to women and non-whites through the requirement for an existing member to recommend entrants. As the same woman weaver claims, however, the victory of the Race Relations Board in getting an Asian man admitted as a tackler may be a hollow one and that the Union may be more covert in its racist stance in future:

"a tackler won't recommend a Pakistani [male]. I think in all the Tackler's Union they've got one Pakistani and no women." (Interview Transcript: CC).

Few in the industry were willing to speak openly about these restrictive practices by tacklers. These practices continue to limit the access of women to all skilled and better paid jobs and most of the labouring categories and, therefore, weaving in the longer term.

Not all firms promote internally from labouring to weaving, however; some advertise for weavers but, of course, with time, internal restrictive practices will reshape that labour supply in favour of men as older women weavers retire. In one firm they only recruited weavers from labourers on the pretext that they could assess their suitability as workers prior to training them to weave. The fact that one Colne woman, who was keen to learn to weave and who had made persistent attempts to enter weaving from her job as a cloth-looker, had been repeatedly turned down, suggests that where the practice is established it is intractable (Interview Notes: SG). Yet, even where local union agreements permit outside advertising for weavers, there's an additional factor connected with the technical composition of looms within and across weaving establishments along gender lines that will gradually construct weaving skills as masculine.

In all the weaving firms visited there was a very clear gender distinction attached to old and newer technology. The latest looms, Picanol's (not to be confused with their ancient version) are worked by men, whilst the established technology - Sulzer's, Saurer's and Picanol's (old version, and

even Lancashire looms in places)¹ are worked mainly by women.

There are several justifications for this gender division of weaving work. First, the new looms are larger, requiring more stretching to 'reach in' (to thread up the heald shafts or when breakages in the warp occur). Secondly re-aligning the 'pick' with the individual warp threads by turning a hand-wheel so that the loom can be restarted are factors regarded as making newer looms more difficult for women to operate. The justification was fairly explicit for the wheel turning as heavier work, but no amount of probing produced a clear justification for 'reaching in' being peculiarly masculine, it being tacitly assumed that men are taller and therefore have a longer reach.² More interesting are the other kinds of justifications utilised in support of these 'requirements of the job'.

Newer machines require training, often at the loom manufacturer's premises and increasingly abroad. This is costly and the preference for men was related by one weaving manager as primarily economic:

"There are fairly good commercial reasons. If you train up a weaver and then she decides to leave for six months because she's pregnant, that can cause major problems if it happens too often. Some employers have in fact shyed away from training women." (Interview Transcript No.5)

The high cost of the newer machinery itself means it has to be worked more intensively over 24 hours, split into the three classic shifts of 6 am-2 pm, 2pm-10 pm and 10 pm-6 am. Since the 1960s a permanent night shift has

¹One firm was just completing its first modernisation of production technology since 1906 from Lancashire looms to old version Picanols! A major factor in the change-over was the lack of women still alive able to work Lancashire looms.

²This illustrates some of the arguments Cynthia Cockburn makes about the gender relations being built into machine design. See especially her book *Machinery of Dominance* (1985)

been the norm in the industry and this is where men initially entered weaving occupations.

Linked to these new shift patterns there has arisen a whole set of justifications for weaving as masculine work that are related to women's domestic labour and gender relations within the home. These are truly revolutionary given the unbroken tradition of women's waged work in textiles, particularly in the Nelson and Colne Valley: high paid waged work that has made gender relations and patriarchal authority within the home in these areas an irrelevancy in the past. Here's a couple of examples:

"The hours are not particularly good for women considering they'll have children to take to school." (Interview Transcript No. 6)

and:

"Women; as soon as they become married they can't operate the shift system and then they get out. It's not a satisfactory life for anyone, but if anyone can cope with it, males probably cope with it better than females, so I think that contributes [to preference for male weavers] as well." (ibid).

But this simply does not square with the fact that the last quoted interviewee also sees women as preferable for some types of weaving work:

"There are advantages to using females; females tend to be more able and more dextrous in handling weaving and tend to be more capable with finer work, the finer weaves. When it comes to heavier work the disadvantages are that they can't handle the sheer weight of some of the pieces involved; it's just a physical thing really." (Interview Transcript No. 6)

Finer weavers are done on older looms, and since all looms are worked on every shift the shift patterns can't be that problematic for women workers to operate. Are these independent women of Lancashire really losing their

established status inside the home as waged workers in their own right? The answer is, I suggest, yes and no. Women's domestic responsibilities are clearly more prominent than they used to be in gendering work within the workplace, but a problem in Lancashire is that there is no ready-formed notion of women as primarily domestic labourers: women have never been socially constructed primarily around the domestic domain. What I suggest may be happening here is that construction is taking shape within production relations in the absence of any local consciousness of femininity as unpaid domestic labour. Let's go over the major gender divisions outlined above.

First, there's the blatant patriarchal practices of all-made trade unions in the industry closing off all the better paid jobs to women. Additionally, local agreements with the ATWU restrict entry to weaving jobs in some firms to routes that pass through exclusively male labouring jobs that even our most astute female weaver informant assesses as difficult to contest. The only jobs available to women are thus the skilled weaving jobs and semi-skilled cloth-looking or unskilled battery filling (creeling).

Patriarchy at work and gender relations are thus in many ways similar and in important ways different from the nineteenth century . The twentieth century tackler still exercises a high level of influence over the earnings level of individual weavers who depend upon him to respond promptly to maintenance, or calibrate the loom correctly. Since weavers are still paid on piece rates, 'down time' is disastrous. They may not use physical violence these days¹ and whilst no one would assert such tyranny exists today, it is

¹Formerly tacklers were cited on more than one occasion as directly contributing to the state of mind leading some women weavers to suicide - one woman indicated where her troubles lay by choosing to drown in the mill dam.

nevertheless still important to maintain a harmonious relationship with the tackler or overlooker. From the nineteenth century they have maintained this power niche by virtue of exclusionary union practices.¹ Unlike their predecessors, however, they have much less patriarchal influence outside the workplace to allocate women weavers to job vacancies (though maybe some, because family recruitment is still widespread).

A new and very significant change that is taking place is the increasing control over access to traditional women's work by men. As we saw in the earlier historical section, the spatial gender division of labour between home and work could not be established in Lancashire despite the weight of the national outrage against Lancashire women's paid work and the dangerous independence from patriarchal authority within the home their high wages conferred.

There are several factors now reconstructing weaving skill along gender differentiated lines which in combination are reconstructing women as secondary workers, either because they get paid less than male weavers or because, overall, they are being deconstructed as primarily waged workers - a notion hitherto at the core of social constructions of women in Lancashire. Since weaving is still the most important industrial manufacturing activity for women in the Nelson and Colne area, workplace gender relations that close off recruitment to weaving for women have a profound local influence, especially where alternative employment for women is hard to come by and where the jobs that are available are of a type that more

¹The reticence of employers, and other unions in particular, to go on record when commenting on the Tackler's Union (NAPLO) suggests there's something worth investigating more vigorously than could be pursued here.

generally construct women as cheap and unskilled labour - i.e. socially constructed by their employment as secondary workers whose prime and proper domain is the home. That is, women in this small area have, until now, continued to carry the tradition of highly paid skilled waged workers that so symbolised the majority of women in Lancashire in the past, and which made the construction of gender and gender relations so spatially unique. Over time, as the weaving industry shrank back into its present-day centre of Nelson/Colne the geographical extent of that spatial uniqueness has similarly contracted.

Yet this remnant of the established gender construction of women as having an indisputable right to waged work is under serious threat. As mentioned recruitment through labouring is one way of dismantling the established right to paid skilled work of women. As skilled work it gave weight to women's economic status within the home and tempered patriarchal gender relations outside the workplace. But nationally ascribed notions of masculinity, such as strength, and other physiological attributes like average male height (and arm length!) have been mobilised to differentiate the skill of weaving itself along gender lines so that men are allocated to new looms that demand heavier tasks and taller people.

These new machines are wider, carrying more 'picks' (the unit of calculating piece pay) so that women on older technology earn less pay. New technology requires new shift patterns and more training and is seen as inconsistent with the national, but certainly not hitherto local, construction of women as primarily domestic labourers. Restriction to day shifts means no access to premiums that might otherwise level earnings gaps between

men and women. These changes combine to make women's work in this area poorly paid in relation to men and, therefore, diminish the clout Lancashire women have historically enjoyed in gender relations within the home. Patriarchal authority within the home is being reasserted in the only place it could be in the Cotton region - in the workplace.

6.6:2 The Textiles Industry Today: Cotton Spinning

The spinning industry today is a much more straightforward story. The pattern of the sexual division of labour today is one that has emerged during the intervening years, particularly in the immediate post-war period, so we begin by sketching in the intermediate history insofar as this bears on the case studies.

From the mid-nineteenth century to the 1930s spinning had been an exclusively male and well-paid occupation. In 1850 mule spinners' wages had been double those of skilled weavers and treble those paid to women in the cardroom where rovings of raw cotton were prepared for spinning (Wood, 1910:131). For almost a century male mule spinners hung onto their elite position on the rather thin argument that the mules required strength to operate.¹ Like the tacklers in weaving, their real 'strength' lay more in their ability to unleash it on the physically less strong members of the workforce: women and children. Outlawing the apprenticeship of women, the Spinners Union established a stranglehold over the mule technology, which served to guarantee claims to skill and high pay.²

¹An argument rendered totally erroneous in reality once hand mules were harnessed to sources of power outside the home to become self-acting mules in factories in the early nineteenth century.

²The dastardly deeds of the Mule Spinners Union through the past 150 years make very interesting reading. At times they wielded enormous power over employers, but were also

Today the occupation of spinning is more or less equally divided between men and women. Again, like weaving, this sexual balance is, in part, accounted for by the traditional exclusivity of night work to men (this time representing the area where male predominance in spinning has continued). But for this historical restriction on women's night work, spinning would have undoubtedly come to be seen as women's work.

The sexual reversal began slowly with the appearance of ring spinning technology during the inter-war period, but mule spinning survived on a progressively smaller and smaller scale until the immediate post-war period on account of the superior quality of yarn that could be achieved, especially on the finer counts. Not for the first time the industry came under severe threat from foreign competition after the second world war. The government of the day weighed-in with massive incentives to modernise, contained in the 1959 Cotton Industry Act. Pressures to increase output and returns on investment, combined with state measures, outweighed the qualitative advantage of mules in favour of the ring spinning methods which, unlike the mules that spin during only one half of the machine's cycle, can spin continuously.

The stranglehold of male mule spinners on the technology established during the transition from domestic production to the factory was a fact that directly contributed to the demise of spinning as an exclusively male occupation. Spinning ceased to be dominated by men as soon as the last mule was scrapped.

very much a law unto themselves among workers and often fought other unions with the same ferocity as they fought the bosses.

Ring spinning has been around, as mentioned, for most of this century, but initially ring spinners had been excluded from the Mule Spinners Union and were instead organised under the predominantly female Cardroom Operatives Union; a device that automatically associated ring spinners with the lowest skilled and worst paid jobs in the industry, as well as placing them in a much weaker bargaining position relative to the Mule Spinners who have traditionally pitted their union strength as much against the cardroom workers as managements. The tactic paid off for a long time and guaranteed their superiority as the most highly skilled workers in the industry.

The fact that mule spinners had had such a direct hand in constructing ring spinning as less skilled and lower paid was undoubtedly a factor that contributed to the gradual encroachment of ring spinning as the preferred method of production, especially on the coarser counts of yarn, during the inter-war period. As less skilled and low paid it was predominantly women's work and the war years consolidated this sexual division between the 'ring' room and the 'mule spinning' room' as the Evershed Commission report, published just before the end of the war, indicates:

"When ring spinning was first introduced into the industry the operatives engaged ... were recruited from the cheap female labour market. The result has been to attach a certain stigma to employment in the ring room." (Bullen & Fowler, 1986:161)

The 1959 Act opened the way for the trickle of ring technology to become a flood that caught the dwindling, but still smug, band of male mule spinners

by surprise. Out-numbered and out-flanked, attempts to turn the tide by sheer acts of defiance and arrogance were, Canute-like, useless.¹

Just as spinning as an occupation was being established as women's work, the Evershed Commission took the industry in hand and radically restructured skill gradings and wages, in the process elevating male occupations and pay in the Cardroom to a status equal to that of mule spinners and at the same time recommending that some of the most skilled parts of the cardroom preparation work were suddenly too heavy for women to perform. These 'too heavy' occupations also became the prescribed route to promotion to the highest skilled grades in the industry. (Bullen & Fowler, 1986:160)

The Evershed Commission's recommendations, which were wholeheartedly adopted, were a blatant attempt to reinstate male labour as the most skilled and highly paid in the spinning industry. Areas like the slubbing frame attendants, for instance, were left unaltered as unskilled women's work for, as the Commission actually revealed, there was a 'shortage of male labour for these jobs'.

The major sexual division of labour in the industry now is between the ring spinning room, which is fairly evenly divided between men and women along the lines of shift patterns, and the preparatory processes, which are predominantly male, but now transformed from some of the most vigorously avoided occupations in the industry to among the best paid.

¹There are many parallels with the patterns of male domination through exclusionary restrictive practices tied to a particular type of technology displayed by male print workers, who have also suffered a similar technologically-assisted annihilation.

This stable pattern was observed in both the spinning mills I visited. Laid down almost by government edict, those people I did interview unsurprisingly gave very few explicit justifications for the gendering of occupations and the divisions between them. The only strong demarcation line they drew was between the heavier preparation end and ring spinning:

"There are no jobs that are not equal. The vast majority of jobs are done by men and women. There are only one or two areas at the beginning of the process that tend to be the heavier end of the job. Bales weigh about 200-300 kilos."
(Interview Transcript No.7)

This statement, of course, refers to cotton, but many parts of the carding, slubbing and roving processes that traditionally make up the preparation side of the technical division of labour are nowadays completely absent where man-made (sic) fibres are being spun. These arrive in staple lengths of extruded filament on 'slivers' ready for placing on the ring spinning machine. The latest designs can spin directly from sliver to the finished cone virtually unattended: even broken ends can most of the time be picked up and 'pieced' by the machine itself. The bulk of the content of ring spinning is thus related to minding the machine, and putting up slivers and doffing finished cones.

After such a turbulent history, the spinning industry now has a stable and well-established sexual division of labour, distinguished only by the differences in shift systems between men and women (despite the removal of restrictions on women's hours) and the distinction between heavy and light work drawn between ring spinning and areas of the preparation of yarn in the cardroom. This last is fairly weak in absolute terms, and is highly

dependent upon the context in which it is drawn. Bales are moved by lifting gear, which requires some manual manoeuvring into position, but, as the quotation above shows, this is a highly relative gender comparison drawn between heavier work at the preparation stage and implicitly lighter work involved in the ring room.

6.7: The Cotton Region Industrial Sub-structure Today

6.7.1: The Aerospace Industry

The aerospace industry is now the dominant manufacturing activity in the Cotton region, far exceeding textiles employment. Men dominate the industry in an overall ratio of 13:2, though parts are heavily feminised, especially the electrical division which assembles panel instrumentation for aircraft.

In the line with the methods outlined in Chapter 4, Burnley had the highest concentration of employment in aerospace activity, and the firm chosen for interview is the largest within the township, as well as being one of the largest aerospace companies in Britain. Four of the company's 16 UK factories are located within Burnley, divided between aerospace and electrical activities. A sharp sexual division of labour exists between these two divisions. On the aerospace side, there are 1240 males against only 120 female workers and 86 of these latter were administrative and cleaning staff. On the electrical side, (based at a separate site) it was estimated that, out of a total of 1200 employees, around three-quarters were women. The unequal distribution of gender was attributed to the different types of skill levels involved in the two kinds of work.

Aerospace work involves fabrication of aircraft engine cowlings and gas turbine housings by skilled apprenticed sheet metal workers and welders, whilst machine tool operators fashion the components such as bearings, fuel injectors and combustion chambers for aircraft engines and weapons systems. Defence contracts brought in between £25 and £50 million to the Group as a whole in the year 1983/4 (Financial Times, 1985).

The vast majority of jobs in aerospace are thus classed as skilled engineering work requiring the serving of an apprenticeship. The Personnel Manager interviewed agreed that the apprenticeship system generally closed off these most skilled jobs to women. But, unlike any of the other cases studied, the acceptance of young women, albeit in very small numbers, had become established practice in the annual recruitment to their engineering school, through which all their apprentices pass during their four-year training period. They are therefore somewhat unique in having two skilled time-served women working on the shopfloor. Even so, these were still something of an aberration since the remaining 32 women working in this division were all semi-skilled operatives engaged in one or two parts of the production process:

"... etching, process - very light process - work such as maskers, putting tape on components prior to painting."
(Interview Transcript No 8)

In this prime gender distinction between heavy and light work they are, of course, not so unique. This, remember, emerged as a key attribute of ascribing work along the lines of sex in all the male-dominated industries of North Staffordshire. On the basis of strength, it was considered that even

the time-served women would be precluded from some areas of skilled work, for instance, press-setting, which was:

"Traditionally a heavy job because of the equipment that they've got to drag on and off the presses." (ibid)

After a pause for reflection the Personnel Manager added that if the gantries and fork lift trucks were used, this job could be performed equally well by women, because these aids would eliminate the need to lift heavy weights. So, you might wonder, why does it continue to be done by men? Anticipating our puzzlement he came up with the final analysis for its continuance as a male preserve:

"It tends to be a male-oriented job because it's dirty, it's oily." (ibid)

This supplies a rather nice example of mutually supporting attributes of masculine work which take their reference point from very different coordinates. The heaviness argument is a **relative** one, taking its validity from a comparison with the lighter process work done by women elsewhere in the factory; that is from the detail division of labour. It is, however, insufficiently watertight by itself to guarantee the masculinity of the work because the use of lifting gear 'springs a leak' in that argument. The men stick their thumbs in this potential damburst by shoring up the masculinity of the work by appeals to more absolute values given currency in wider ideologies of gender. To assert their positive claim to dirty work, they invoke a negative aspect of wider notions of female appearance, for surely, if women are not less impervious to soap and water, (which even they would not risk claiming) then the idea that they should not look dirty appears to be the underlying concern.

There's another interesting observation to be made in this example, and that is the sequencing of the justifications outlined in the above quotations. All the countervailing arguments were successively anticipated and pre-empted by further explanatory justifications. This seems to indicate an awareness of what a watertight justification should look like, as well as a sensitivity to the kinds of objections that can legitimately demolish the gender construction being erected. Success in breaching one defence is countered by raising the defences higher. This throws light upon the mechanism of gender construction and points to how quite different attributes change their value over time. Had this interview taken place even ten years ago, it is doubtful there would have been any recognition of the fact that tasks could be organised differently to allow women to perform them (by the use of lifting aids, for example) and thus the heaviness argument would not have been perceived as vulnerable. The fact it was recognised shows, I think, two things. First, it indicates that the value allocated to 'heaviness' attributes is possibly changing for, in this particular instance, it is insufficient by itself to secure a masculine ascription. Secondly, it offers some evidence for the social force of the women's movement in exposing the traditional defences of masculine work as spurious. However, as we have just witnessed, this storming of the barricades has not toppled them but produced new kinds of barriers, illustrating the **dynamic** of gender construction and the relations based on them.

In addition to the heavy aspects of the skilled engineering jobs, the basis of the skill itself is undergoing a transformation with advances in technology. Machine tools for some time now have been computer numerically

controlled (CNC), where the operator inserts a pre-programmed punched tape into a computer console alongside the workstation. The settings and instructions for the machining of a component are thus performed automatically. The skilled machine tool operator's role is reduced to checking lubricants, taking off and putting on components and quality inspection. Components are no longer made to a drawing, as computer design is now beginning to be integrated with the machine tool. In theory this eliminates the need for monitoring at the workstation by a machine tool operator, since its feasible for components made using CAD/CAM¹ systems to be designed, and the software electronically communicated to the machine tools, which can be monitored remotely from a central control area. The major reorganisation of production and division of labour within the workplace that a fully integrated CAD/CAM system would permit has, so far, not occurred. Traditional shopfloor manual engineering skills would give way to software and production engineering skills applying their mental labour to the creation of products and the monitoring of their production. There would still be a manual element, but under CAD/CAM this could be reduced to simple labouring functions². The CNC technology already in place has, however, alone been responsible for a 55% reduction in the workforce at Burnley over the past decade as the number of machines one operator can oversee has been extended. The bulk of this reduction occurred in 1983, when the workforce halved, and a further 300 jobs are currently scheduled for redundancy. These changes have not necessitated radical changes in the production process.

¹Computer-aided design and Computer-aided Manufacture.

²For a detailed analysis of the variations in impact of CAD/CAM in different organisational and production contexts, see Sorge, et.al (1983) and Wall T D et.al (1978).

At the same time, new composite materials (a combination of materials with dissimilar but complementary properties) are being introduced that cannot be fashioned by traditional machine tools, but instead use quite different methods of fabrication such as moulding or extrusion techniques. Skilled sheet metal workers are thus beginning to be replaced by semi-skilled fitters who bond composites together instead of welding or riveting them. The two principal supports of masculinity based on time-served skills coupled with the heaviness of the work (new materials tend to be lighter) are thus currently being eroded, and demarcation lines are at the root of a current inter-union dispute between the sheet metal workers and the engineering union, representing the skilled engineering grades. Whilst this is strictly a squabble between 'the boys', the outcome does nevertheless alter the context and conditions of future inter-gender struggles because it alters the shape of the men's posture in differentiating what they do from women's work.

The Shift Patterns:

In common with other engineering concerns, this company operated a three shift system: 6am to 2pm, 2pm to 10pm and 10pm to 6am. They also had a 12-hour day shift linked to a 12-hour night shift, running over four days of the week. The only woman working nights was the sick bay nurse, and there was no intention of extending night work for women, despite the removal of all legal obstructions. The reason was that there were **currently** no women working in areas of production for which a night shift was in operation. The night shift has historically been the primary restrictive practice, and the removal of restrictions on women's night work is not regarded as sufficient in itself to effect a change. The sexual division of labour within the workplace, is thus reinforced by the different shift patterns

men and women work. The details differ from the case of Biscuits in the Potteries region described in the last chapter, but the principle is the same: where men and women work the same shifts, skill differentials (principally apprenticed jobs) maintain the earnings gap between them. In addition, men have sole access to earnings premiums for night work. Either way, women are less skilled and lower paid.

6.7.2: Royal Ordnance: Darwen

Until recently, the industry was attached to the Crown Service. The company visited was incorporated as a public limited company in 1984. The prime activities of this large engineering and chemical group, with 16 sites around the UK are still connected with the manufacture of defence systems, sub-systems and weapons components.

The Darwen site is part of the largest division in the Group - that of ammunitions, whose products range from fabrications-type work in the fashioning of warhead bodies, bomb and mortar shells to small electronic control devices that detonate or guide projectiles such as fuses, timing units, primers, safety and arming devices. Darwen production is devoted to this latter group of ancilliary devices, employing a total of just under 2000.

The Labour Process:

Production divides into two primary spheres: the machine tooling of components and their assembly. Products are mostly mechanical, but increasingly they incorporate electronic devices and this has led to a new and expanding section at this factory; the bulk of it assembly work.

The machine tool shops were entirely a male skilled workforce; all time-served apprentices represented by the AEU. No applications for apprenticeship had ever been received from women. This side of production then conforms to the character of the other engineering cases examined.

The assembly work, by contrast, was largely female. This was unskilled work, though the Personnel Manager whom I interviewed pointed out that it was not intrinsically so. He considered some of the women were extremely knowledgeable about the components they worked on and could identify and correct faults on occasion. The reason they did not qualify for skilled status was the fact that their knowledge was **not transferable** beyond the particular component with which familiarity had established their expertise. This was in contrast to skilled men machine tool operators who possessed the ability to make any component from a drawing, despite the fact that CNC machine tools in practice obviate the need to routinely do so. However, small batch irregular components may occasionally call for the need to work from such drawings. On the whole then there is some convergence in skill levels between the increasingly deskilled content of routine machine tooling and the acknowledged skill applied in "unskilled" assembly work. Since all the apprenticed skill jobs are done by men, the transferability of skills an apprenticeship confers is a prime way of distinguishing between men's and women's work on the shopfloor.

Personnel were at pains to point out that there was no real barrier to women becoming skilled machine tool operators; they simply did not apply for apprenticeships. Even the manoeuvring of heavy components was

expressly discounted as an eliminating factor, since lifting gear was used wherever possible. This is quite interesting because it demonstrates the arbitrary nature of skill and gender construction. Back in North Staffordshire, (and elsewhere in the cotton region) where there **had** been female applicants for apprenticeship in the Electrical Machinery and Earth-Moving Equipment industries, you will recall that more emphasis was placed on the physical aspects of the work - its heaviness or dirtiness - as being more appropriate or better suited to the biologically given attributes of men. In this particular Lancashire factory, this trump card is simply not necessary to win the argument. In the one instance where there are time-served women (aerospace at Burnley) they are regarded as unsuitable for areas of production involving lifting of the heavier components. Clearly their presence in machine tooling prevents the use of the 'discouraged worker' or dirtiness arguments, but the fact that lifting aids eliminate the need to physically lift heavy weights is conveniently ignored compared with North Staffordshire where it presents no obstacle.

To amplify these points, it is instructive to compare the male sheet metal workers in Aerospace at Burnley with the women at this site (a few miles away at Darwen) on ordnance assembly work. Sections of this assembly work entail the soldering of fine electronic components on circuit boards. This was classed as "unskilled" primarily by reference to their male work colleagues at the same site in the Darwen machine tool shop. Yet, the "unskilled" assembly work at Darwen essentially only **differs in scale** from welding work done by "skilled" sheet metal aerospace workers over in Burnley.

The construction of assembly work as women's work was not wholly a matter of negative comparisons with the men's work at this site in Darwen. It also had 'positive' components; the assembly work was stressed as a clean and less noisy environment: but note this is a latent reference to men's work as dirty work. More importantly, the content of the work was regarded as tedious and fiddly and thus more suited to female attributes. The construction of the women's work then takes place along two opposing axes: negatively in relation to the sexual division of labour within the workplace (not skilled) and positively with reference to wider notions of sex differences (repetitive and dextrous).

The supervision of assembly work is characterised by additional gender-specific features we have identified in different contexts elsewhere; notably absenteeism and technical judgement. Immediate supervision was carried out by female line supervisors, who monitored line speed and performed cursory quality checks by eye or with pre-set gauges. Overall supervision and quality control, however, was done by men. They performed the machine testing of components, and set or made adjustments to the machines the women used to maintain quality output. The effort performance of the women assembly workers is then overseen by other women, and this, incidentally, is a characteristic with a long history. Women may only supervise other women, but their authority rarely seems to extend to male employees of any grade, except perhaps very young men, mirroring authority relations under the domestic division of labour: patriarchy, after all, does literally mean the 'authority of the father'.

The men on the assembly side have overall supervisory control over the line by virtue of the technical judgement they exercise over quality control. Testing, in essence, requires only the most basic technical ability. All you need to know is how to place components on machine testers and how to read the resulting digital read-outs and translate these into the appropriate operational adjustments. This last element arguably requires a formal technical training of some kind, but, like the apprenticeship system, there seems to be no other reason than the force of tradition for this work continuing to be done by men. When this was queried with the interviewee, a major obstacle to in-service training of the women was their reputation for greater unreliability manifested in absenteeism. This particular Personnel Manager had obviously given serious thought to the issue of absenteeism and gave the most sophisticated analysis of its probable cause. He recognised that child-care and other domestic responsibilities made a significant contribution to a 10% rate of absence among women, against 4% for men. But this was by no means the sole explanation in his opinion. Discounting for the domestic division of labour, he was still left with the conclusion that women were less committed workers, even conceding that the more tedious nature of women's work might also be an underlying factor in gender differences in absentee rates.

Having noticed that most of the assembly women were of child-bearing age, I raised the question of a workplace creche. This also had clearly been investigated, for the answer was that costs would outweigh any benefits from reduced absenteeism; costs, incidentally, that currently do not attract tax relief. This is the point at which the limits of equal opportunity are confronted, for the corollary is that patriarchal practices outside the

workplace set boundaries on the exercise of equal opportunities within the labour force. As long as women are seen as primarily responsible for child care and domestic labour in general then visits to dentists, doctors, nursing sick children, caring for the old or being around for home visits by repair and utility workers fall upon the woman to cope with. The resulting pattern follows a circular logic that is extremely difficult to break. Differences in skills and pay at work between men and women materially reinforce absenteeism by women since a woman's position in the technical division of labour at work makes forfeiting her wages the most economically rational choice within the household. As already argued, this feeds back into the perception of women as less committed workers that in turn disadvantages their efforts and claims to enter more skilled work. Viewed like this, it is no accident that a positive component of masculine gender ascription is their more reliable and stable nature as workers. It is explicitly linked to their patriarchal dominance within the family, itself the *sine qua non* for establishing their structurally superior position in the labour force.

6.7.3: Paper Production : Blackburn

The paper and board industry is characteristically a male-dominated one, and the case study firm is no exception. Like other male enclave industries, the prime sexual division of labour occurs between direct and indirect workers. Men dominate production jobs and women clerical, cleaning and other production support functions. In productionn roughly 90% of the hourly-paid workforce are men, including maintenance engineers. Out of a total workforce of 850 at this site, only 39 are female production workers, a further 14 are part-time office cleaners, whilst 115 work in office jobs where they outnumber male staff by approximately two to one.

Paper has been produced on this site for over a century, so the industry is in no sense a modern alternative to traditional textiles employment in the area. The demise of textiles has, however, dramatically increased its importance to local employment, so that today it ranks as the third most important manufacturing activity in the Blackburn TTWA, behind Ordnance & Small Arms and Paint manufacture (discussed below), both of which are located at Darwen, a sub-area of the Blackburn TTWA. These three dominant MLHs are all male-dominated industries, marking a complete reversal of the historical sexual domination of the local labour market since Blackburn and Darwen were the major centres of weaving activity in which female labour predominated.

The Paper-making Labour Process

Paper production is, in my respects, similar to brewing. A largely automatic process produces a base paper from small wood chips that are fed into a 'digester' which cooks them under high temperature along with chemical additives to a porridge-like consistency. There's very little labour involved at this stage. Bales of pulp are manually off-loaded from lorries and fed to the mixer, but after this the control of the mixer and the various additive chemicals (sizing agents, water) are under computer control.

Once mixed, more water is automatically added to the 'porridge' and this mixture is delivered onto the 'wire'; a misleading term for what is essentially a specialised conveyor belt that aligns fibres in one direction. The sheet passes through a series of rollers set in a mangle configuration which compress the pulp mixture to resemble a roll of paper and this roll moves on to the drying process where it passes, rather spectacularly, inches below open gas flame jets at high speed.

This base paper can then be variously treated with coatings - double coatings for magazine paper, for example, and high-cast coatings to produce a gloss effect finish of the kind typically used for prestigious sales and information literature. To do this the base paper passes through a coatings bath situated under the first in a further series of rollers, to traverse to yet another, but shorter, drying process. Finally the roll is guillotined into large sheets, which are deposited onto stacks at the end of the conveyor. From the unloading of the pulp at the beginning of the process to this point the paper is virtually untouched.

The interview took place with the General Manager of Operations, who found some difficulty in defining a clear-cut sexual division of labour. This was true in the sense that many areas of production were not exclusive to one sex. Even so, the balance within individual areas was always clearly in favour of one sex, with a peppering of the other. In addition, there were other areas composed entirely of males or females. The exclusively male areas of production are connected with the initial stage of manual off-loading of raw materials and their feeding to the mixer. The central paper production process on the 'wire' and through the drying and coating processes is not gender exclusive, but males make up a sizeable majority of these production workers. The final stage of inspection at the end of the 'wire' is also non-gender specific, but is seen primarily as women's work. Men, therefore, are unique in being able to claim certain areas and jobs as exclusively masculine.

The underlying rationale for these divisions were regarded as largely historical. Men had always worked on the pulp and cast-coating machines. The principle reason seems to have been the technical appraisal of the product and manual adjustments to the process formerly required of operatives in these areas prior to the introduction of computer control. Machine operators would have appraised quality and manually adjusted valve settings, roller tensions and the like to achieve the desired end quality. In other words the masculinity of the work is based upon technical expertise gained through a long association and familiarity with the product, and this had established their skilled status. Such empirically-derived knowledge, in being non-transferable, was precisely the rationale for **excluding** women assembly workers elsewhere in Blackburn (in Ordnance manufacture) from skilled status! Unlike the adversaries of those women in the ordnance machine tool shop, however, paper industry skilled direct production workers serve no craft apprenticeship. Training is typically one or two weeks, or up to a maximum of four weeks for "some of the more sophisticated jobs" (Interview Transcript No: 9). Today's computer-controlled process has naturally eradicated the reliance upon experiential constructed knowledge, and the continued preponderance of men in the central processes of paper creation is now wholly justified by the occasional need for heavy physical labour in replacing the 'wire'. The 'wire' or conveyor, which is several metres wide, is manually disconnected from its fixings and hauled, like a Wimbledon tarpaulin, off the machine.

The exclusivity of inspection work being seen as female work seems to be the result of a decision made in the 1970s to improve the quality of the paper:

"We wanted to improve the quality and improve the inspection of the quality, so we introduced what we call in-line inspection and so women are now involved as well as men." (Interview Transcript No.9)

However, inspection work is, as indicated above, seen primarily as women's work:

"Men do it at night; women do it during the day, *purely because until recently women have not been allowed to work nights*. But, as time goes on, of course, women will be allowed to work the night shift and then they can move into that." (ibid, my emphasis)

The import of the italicised phrase is that men would never have been engaged in inspection work at all if women had been able to work nights in the past, and this is supported by the clear preference that was expressed for women in this area:

"We find that normally women can do a better job than men. It's a very - well, how can I say - they pick up a piece of paper, they inspect it to see if there are flaws; marks, creases, broken sheets etc. It's not a monotonous job but it's the type of job where *a woman* can be thinking of other things but also concentrating on doing the job efficiently." (ibid, my emphasis)

There's a hint that this 'switching off' doesn't quite come as naturally to women as they indicate, but other purportedly 'natural' attributes come into their own to support it:

"They [women] seem to *adapt* themselves far easier to inspection than men because, you see, a woman inspecting, she has hundreds of sheets to inspect; she seems to have the knack and the flexibility of the hands in order to fan the sheets to look at them quickly. It's one of those things women seem to be happiest doing and so approximately 20 women are employed purely on inspection." (ibid, my emphasis)

This work then seems to require judgement abilities that have been an important component in ascribing skilled status to males in the central paper production process and that elsewhere have historically determined masculine work, though this, and the heaviness of the work, which I shall mention in a moment, are completely ignored in favour of the wider stereotypes of feminine attributes. The above quotation also gives the measure of concentration of women in certain areas of production. As mentioned in the introductory remarks to this case study, there are only 39 women engaged in direct production, so the 20 women in inspection represent half of all women production workers. This is out of all proportion to the numbers of men who do the inspection work at night:

"We also have three or four men doing the same job, but we've found that women seem to do a better job of inspection."(ibid)

These three or four men represent a tiny fraction of the male workforce. There are 410 males working in direct production jobs (not including the 113 in maintenance) so this handful account for a paltry 1% of male hourly-paid employment, whereas just over 50% of the women hourly-paid employees are concentrated in the area of inspection, despite the acknowledged heaviness of the work:

"When you're inspecting paper, sheets of paper are heavy to lift; a ream of paper in a large sheet. We have no difficulty with the women lifting and re-piling on inspection." (ibid)

This is remarkable in that it did not appear as a salient attribute in the justifications for inspection as women's work, quoted earlier.

The other, but lesser, concentration of women was in the packing department where individual reams are wrapped, stacked on palettes, labelled and covered with a polythene jacket ready for despatch. Despite there being "no differentiation between men and women in the paper industry" there are in fact quite distinct concentrations of gender-specific work, either as a consequence of exclusivity, as in the initial stages of production, or by sheer weight of numbers determining the overall sexual bias of jobs, as is predominantly the case for all other areas of production. In the absence of an apprenticeship system, one possible explanation for a masculine bias in the most skilled of the production jobs, is a similar closure mechanism. All progression to skilled work was achieved by starting at the bottom in labouring/sweeper grades where the physically arduous nature of the work is uncontroversial.¹ This also offers a possible explanation for the invisibility of the heavy aspects of women's work in inspection. To recognise it would neutralize the men's claim to heavy work as their own.

The Shift Patterns

The only sexual difference in shift patterns currently in operation is, as already outlined, in the area of inspection, where men's night work was explained as merely the continuance of a purely pragmatic practice established prior to the removal of restrictions on women's night work. However, shift patterns were currently being reorganised in order to utilise expensive new technology more intensively.

¹This mirrors the contemporary situation in weaving occupations, whose content provides no obvious and incontrovertible alignment with wider gender stereotypes, but where entry routes have been narrowed to openings that must pass through a male enclave occupation for which more robust gender justifications are provided by popular ideology

A changeover from a three-shift to a four-shift system was underway at the time of my visit. This entails a 4 x 12-hour shift, with individual workers having a 4 day rest period at the end of each cycle, compared with the former 8-hour shift worked over a normal working week. The new structure allows machinery to run continuously, 24 hours a day, seven days a week. The new 4 day cycle is a rolling one, so that over the course of a month an individual worker will have worked weekend days as part of a normal working week under this shift pattern. Given the absence of any statutory restriction on women's working hours, there's nothing to prevent women working the same shifts, including the night shift.

It is uncertain, as yet, how this combination of new shift patterns and the removal of restrictions will affect women's working patterns. For the moment we should note that in the case of this particular firm there would seem to be no resistance to women working nights in inspection work, as the earlier quotation suggests.

A possible outcome is that nightwork by women here will be the means for consolidating areas of work regarded as women's work, and men will disappear from inspection altogether, though the need to work weekends as part of a normal shift pattern may well stimulate countervailing pressures on the domestic front to prevent women from working this new shift pattern, day or night. Either way, patriarchy wins the day because consolidation would reinforce the sexual division of labour within the workplace. The isolation of inspection as women's work increases its vulnerability to being classified as unskilled work, compared with the skilled jobs that men do, with the effect that women's shiftwork premiums will be more than

cancelled out by the disparity in hourly rates between skilled and unskilled work. Earnings gaps between men and women would thus not be appreciably eroded. The maintenance of this earnings gap, of course, lends weight to men's patriarchal position under the domestic division of labour. And, as noted above, this is the material base that supports household decisions over absenteeism or indeed who does paid work, to structure in the first case, women's paid work within the technical division of labour or, in the latter, to construct women as primarily domestic unpaid labour.

The alternative outcome is potentially more serious given the increasingly widespread adoption of shift patterns of this kind across many industries keen to extract the full potential from expensive capital machinery. If such patterns were to become the norm in manufacturing industries, the present sexual segregation of the workforce (noted in Chapter 2) where women are already concentrated in a narrow range of industrial sectors and occupations (many by virtue of operating shift patterns that dovetail with domestic responsibilities), may well significantly increase. Current patterns of labour force segregation (also discussed in Chapter 2) are already the established basis for women's unequal status and pay at work. A further shift in the direction of greater segregation thus implies a further enhancement of the structural advantages currently accruing to men inside and outside the labour force.

6.7:4: Paint Manufacture : Darwen

Like the paper industry, paint manufacture has also been established in Darwen for some time and has likewise increased its significance for employment in the area with the loss of traditional jobs in textiles.

The case study firm is one of the three largest producers of retail paint, and employs a total of 2105 in its manufacture. Just over half of these are based at the Darwen site with the remainder split between two smaller production sites in Manchester and Haltwhistle, (close to Hadrian's Wall) and other non-production functions in sales and distribution depots.

The Labour Process

Darwen's production divides into paint and wallcoverings processes. Both are male-dominated overall, and the few female production workers involved in each case are primarily concentrated in one or two areas of production, with maybe a handful of women in areas designated as men's work; a broadly similar pattern to that just described for the paper industry. In the wallcoverings side of production this is unsurprising given the virtually identical nature of paper and wallpaper production processes. Apart from the narrower widths used and the additional embossing of patterns on wallcoverings (simply a matter of passing paper through additional sets of engraved rollers that crimp the pattern into the paper) the basic process is essentially the same. The sexual division of labour in wallcoverings then parallels that described for the paper industry above, with all women workers concentrated in wallpaper inspection and wrapping operations.

Similarly, in the making of paint women are largely confined to the filling operation though, here again, there are small exceptions:

"There has been a great distinction in the past between men's and women's work. One of the areas where we have a lot of women is in filling; a semi-skilled type of job, looking after the filling machines. But, increasingly, still in very small numbers, we have women who are going into the warehouse

fork-lift truck driving and one or two into paint manufacture itself." (Interview Transcript No. 10)

Between the lowest skilled jobs of cleaning and general labouring on the factory floor and the apprenticed skilled craftsmen who maintain the plant and equipment, there exists a loosely-defined set of more or less skilled jobs. The extreme parameters relate to the degree of training; from virtually none but the most rudimentary for labouring, to a four year apprenticeship in the case of skilled craftsmen. The bulk of production operatives in the middle received more or less amounts of in-house training, and thus their background experience was irrelevant. The most skilled of these production operatives was the colour matcher, who is male. Humpers of materials, wrappers and packers were semi-skilled, whilst the core of the workforce actually engaged in the making process itself were rather ambiguously termed "further skilled". Within this loosely-defined hierarchy of skills women are still overwhelmingly most heavily concentrated in the semi-skilled areas of filling and wrapping. The lack of tight skill definitions in general amongst production operatives coupled with the in-house training for jobs in these areas did mean that women could theoretically progress into 'further skilled' categories of work.

The "most skilled hourly-paid job" of colour matching was a position analogous to that of the panel operator in brewing. The two processes are in fact extremely similar; both are mixing processes performed largely automatically under computer control. The base ingredients for paint, delivered from storage vessels, and the mixing and dispersing operations are all performed automatically with initial amounts of pigment added manually. The pigmentation or other additives that affect the tint or viscosity of the paint are then manually fine-tuned by the colour matcher immediately prior

to the filling operation. A great deal of this monitoring is now performed by computer matching of production batches with pre-existing colour or texture specifications held in memory. However, the final verdict belongs to the colour matcher on the grounds that the human perception of colour is the only one likely to agree with that of the end user:

"It still needs that trained eye to adjust that final little bit because, if you were to be presented with something that didn't match but we said: 'Well, the computer said it was a match' you would say: 'Well, I don't care, my eyes tell me it isn't a match'." (ibid)

Now, this seems reasonable at first sight. However, if a computer matches a batch against a historical batch, the two should be identical and mismatches very improbable. The need for the human eye therefore becomes irrelevant. It may be, of course, that batches are not compared against historical ones, but merely measured against an absolute specification, in which case variations in pigmentation strengths and the like may indeed produce results marginally, but all importantly, different in colour from that predicted. This seems to be the case in this firm, necessitating manual adjustments by the colour matcher in line with the appraisal of the human eye. This does not, however, amount to a justification for male eyes to do the judging. If anything, since it well known that men experience colour-blindness to a greater degree than women, it is a justification for using women's eyes.

In common with so many other examples, his claim to skill rests upon the seemingly male monopoly of judgement skills. This appraisal exercise has two elements. First the 'trained eye', and secondly the empirically-derived knowledge used to determine the type and extent of adjustment required. In

this last the computer makes recommendations, but the final decision rests with the colour matcher. The superiority of the human eye is thus sustained, though, as suggested, there's nothing particularly masculine about a 'trained eye'. That this is a purely arbitrary claim for the attribute being somehow masculine is shown by the fact that women inspecting paper with a 'trained eye' were regarded as possessing a peculiarly feminine attribute and as such, therefore, unskilled. However, the second component forms the main plank in the construction of colour matching as masculine, for, like the ovenmen in baking, the panel operator in brewing and process workers in paper-making, the experience upon which actual adjustments are made is achieved through the greater likelihood of men being able to sustain the necessary long service in the job. The keystone of the colour-matcher's job thus ultimately rests upon gender relations under the domestic division of labour that prevent many women from building up the necessary continuous service record to acquire empirically-based skills. In jobs like this too, where the occupant is perhaps the only one of a kind on a particular shift, the widespread belief that women have much higher rates of absenteeism than men is likely to compound the view that they are less stable workers. Audrey Hunt's (1975) survey of 'Management attitudes and practices towards women at work' found personnel managers regarded men as better than women with respect to: not taking days off for sickness, not taking days off for other reasons and, staying with one firm. Their opinions contradict her earlier study findings (1968) showing that, on average, women are in fact **not** less stable than men. But as the 1975 work shows, absenteeism was in fact more closely associated with job status, and not sex, with lower status workers displaying the highest levels of absenteeism. As Hunt points out, given that the level of women's jobs, on average, is

considerably lower than that of men, it is not surprising that their absenteeism record appears to be poorer than men's (1975:97). A decade or so later, the picture emerging from the studies documented here marks little change in such attitudes, for the themes of low attendance and poor stability have been recurrent ones throughout the cases presented here.

6.7.5: Footwear

The footwear industry is an important area of employment for women in the Cotton region. Across all employment for women it ranks twelfth but, more significantly, it represents the fifth most important manufacturing activity for women.

As Chapter 4 argued, manufacturing and other non-service activities are regarded as the prime areas where spatial differences in economic structure and the workforce characteristics and culture associated with that structure most strongly emerge. Added to the general importance of the industry for women's employment in the region, by far its greatest significance lies in the fact that it represents the only manufacturing industry of regional stature dominated by female labour, as a quick glance down Table 4.3 in Chapter 4 shows. Thus, whilst footwear manufacture plays a central role in the construction of women's work in the region, it contributes little to the spatial distinctiveness of the region's labour force, lying as it does at the perimeters of the regional employment hierarchy at 23rd place. Even so, its salience in characterising women's labour simultaneously contributes to the way men's work is constructed.

The Footwear Industry

British shoemakers are again feeling the pinch as sterling strengthens and imports from low-wage countries soar. The effect has been to wipe out the moderate recovery achieved since the slump of the early 1980s.

Import penetration has been a perennial problem since the 1950s, though it was not until the early 1980s that the force of this tide, gaining strength throughout the 1960s and 1970s, finally overwhelmed large sections of the industry, when a decline in consumer spending and the demise of export markets removed the buttress shoring up many businesses. Factories closed and thousands lost jobs in the industry's traditional heartlands of Lancashire and the East Midlands.

The Structure of the Industry

The survivors make up an industry polarised between two giants who account for a third of UK production, and a mass of small family firms, many of which employ less than 50 workers. Only one fifth of the 750 footwear producers employ more than this figure. (FT:31.5.1988). These smaller firms hung on in the 1970s by continuing to implement cost-cutting measures which, as Massey & Meagan (1982) have shown, primarily took the form of intensification. By 1985, several changes fuelled optimism that the industry would undergo a full-blown revival. Fashion swung to traditional British styles, and output rose on the coat-tails of a strengthening of shoe retailing through the large chain stores such as Marks & Spencer and Next. Intensification, largely through the piecemeal application of advanced technology in all but the largest concerns, put the industry in a position to meet this rising demand as well as make inroads into the levels of

import penetration. At the start of 1987 the industry was riding the crest of a wave, but by the autumn they were being dashed against the familiar rocks of international exchange rates and further exposure due to a lack of import controls. A decline in the dollar, and the Far East currencies linked to it, brought a fresh flood of imports. This was exacerbated by the oriental producers' worries that the US was about to erect trade barriers, causing a diversion of exports to the relatively unprotected markets of Europe. Unlike the clothing industry, which faces a similar operating environment, there are no import quotas on shoes. Imports reached an all-time zenith at almost 180 million pairs in 1987¹, representing a devastating 64% level of import penetration. Meanwhile a strong pound choked off any possibility of using exports as an escape route on this occasion.

The reaction to all this has been to cut costs through measures such as short time work and the implementation of strict expenditure regimes, even among the giants like Clarks, who had embraced technological change much more comprehensively than the multitude of small family concerns who were consequently exposed to the latest deluge of imports to a far greater extent. The only producers weathering this storm have been those shielded by guaranteed UK retail outlets as suppliers to the big chains, notably Marks & Spencer, by virtue of their 'buy British' policy, but even these producers have had to satisfy themselves with a mere sustaining of output levels. The case study producer is one such firm. Like other producers in the industry, they are currently adopting new technology in an attempt to steal a march over foreign competitors. Firstly it increases productivity and secondly allows them to move into more complex styles and higher value-added lines

¹The British Footwear Manufacturers Federation statistics.

incapable of cost-effective production by hand, and thirdly, it gears them up for swifter responses to fashion changes.

Footwear Manufacture in Burnley

The producer chosen for study was until recently a family concern and, by the industry's standards, ranks among the large employers with 400 employees, though these numbers nowhere approach the scale of the big two - Clarks and the British Shoe Corporation who have typical payrolls of around 1,000 workers. Seventy per cent of enterprises, however, employ less than 100 workers (Massey & Meagan 1982:37) so the case study firm is located at the large scale producer end of the industry.

Major changes in recent years have occurred in an attempt to shape up to an increasingly hostile business climate. A series of acquisitions during the 1960s and 1970s of many of the footwear dynasties operating in Rossendale valley was followed in the late 1970s and early 1980s by rationalisation and closure to produce a sleeker operation of four mainland production sites; two in the dense concentrations of the Rossendale valley, one in Bacup plus the head office and factory at Burnley. Over the last two to three years further trimming through redundancy has taken place in response to business uncertainty and a spate of poor summers that have affected seasonal sales.

The ensuing years have seen a shift away from the staple vulcanised slipper (the old fashioned type with a thin soft rubber sole) into the higher value-added lines of poly-urethane and leather or suede shoes of more classic design. This shift has been the response to cheap labour competition from the Far East, and lays behind the phenomenon of the mushrooming of small

local domestic outfits manufacturing vulcanised slippers in garages and spare rooms within the home; many known to be starting up as a consequence of the government Enterprise Allowance Scheme (Interview Notes No 11)¹. The company now only produce vulcanised slippers at their Isle of Man plant, where tax advantages and relatively cheaper labour make it viable. The only low value added line remaining in British production is the newly-developed more hard-wearing style of slipper with injection-moulded soles suitable for short trips outdoors. The productivity gain achievable with injection-moulding techniques, that produce a half pair every 20 seconds against 4 minutes under the vulcanised process, outweighs the labour cost disadvantages.

The now predominant poly-urethane lines, introduced in 1985, are cement-lasted. Depending on the style and the work content involved, however, parts of the shoe may be imported for assembly on British sites. These are usually styles or materials requiring a high degree of the labour intensive preparation operations or more than the usual number of 'closing' operations by sewing machinists, where foreign competition has the edge. As the factory manager explained, the technological gap between Thailand and themselves meant in the order of a 10:1 ratio in numbers employed at a given output, but even then, on labour costs alone, with Thai women earning around £2.00 per day, they were unable to match the Far East.

This strategy of import sourcing of labour intensive shoes or shoe components has recently been institutionalised by the creation of two separate companies within the Group's structure for the sole purpose of

¹Those interested in homeworking might find this development of a local sweatshop industry at the low technology end of the industry worth pursuing.

importing whole shoes or uppers; one supplying the manufacturing operation and the other comprising a straightforward wholesaling operation supplying trainers and fashion shoes direct into the general trade. As will become clear when reviewing the labour process, import substitution has a direct effect upon women's labour in the UK industry since it is in the highly labour intensive operations in which they are concentrated.

Sweeping changes to link existing and new technology (CAD/CAM) and just-in-time techniques in an integrated way were underway at the time of my visit. The labour process described here will therefore undergo a transformation over the next year or so. There are two main problems with implementation. First, difficulties with just-in-time are foreseen since Far East component sources produce good quality but deliveries are unreliable. Secondly, a major constraint on the extent of automation relates to the fickle nature of shoe materials. For instance, highly malleable fabrics and leathers make alignment for automatic processes difficult to achieve, and natural materials need to be cut 'tight to toe' so that the natural stretch is aligned to wearing conditions. Care also has to be taken to cut the various parts of the shoe in accordance with variations in quality across a skin: the less grained, more supple areas for the fronts and uppers and the rougher grained and stiffer parts for more hard-wearing areas like heels. These sorts of judgement tasks are, as yet, not amenable to technological control. Additionally, cutters need to combine these considerations with achieving the maximum number of cuts from a single skin; a factor which can influence costs considerably. The established skills in the cutting room therefore will undergo less radical changes, at least to the extent that natural materials are used. Ironically technical advances are going into place at

precisely the moment when the fashion swing is toward natural materials that are the least amenable to automatic processes.

This reorganisation to take advantage of the most advanced computer-aided technology owes much to the personal ability and background of the interviewee. An electronics engineer by training, he is both well-informed and unafraid of using new technology, and represents something of a 'young Turk' within this firm, and the industry in general, which has traditionally been managed by what I call 'subsistence capital' - moderately-sized family run concerns content to produce to provide a family living.

In company with technical changes, a concerted effort was being made to restructure management-labour relations which had traditionally been extremely antagonistic. The introduction by the interviewee of more participation in design and operation decisions by workers and the abolition of many simply farcical deferment practices marked a radically new basis for workforce motivation through involvement. This demystification process had transformed industrial relations to the point where it was now described as a "happy factory", and this illustrates the crucial influence management cultures have on the course of change.

As argued in Chapter 3, such periods of change in the labour process are times when gender relations potentially undergo a restructuring. New processes, new occupations and skills shift the point of equilibrium between skilled and unskilled, mental and manual labour and, most importantly for us, between men's and women's work. Depending how widely the changes occurring in this case are adopted in the industry as a whole, they

possibly threaten the established female domination of work in this industrial sector.

The Labour Process

The Development of Shoe Design:

The design department is not engaged in design as such. Fashion styles are dictated more generally by clothing fashion houses, and the industry has a similar system of disseminating fashion ideas through exhibitions and the like. This is duly interpreted by Marks & Spencer buyers, for whom production at the Burnley site is almost exclusively dedicated. Once a broad style is agreed, the design team produce a production pattern to specification materials. Some design is done on computer, but there is still a good deal of traditional drawing board work and paper and scissors modelling, to make stiff card patterns for the various shoe components. These are then made up in prototype for customer approval, in a similar manner to the way a home dressmaker works from a pattern. This was work reserved for a few male 'old timers' who had the traditional skills to make a shoe entirely by hand processes, especially the skill to cut the pattern by hand from a skin. These skills acquired over a lifetime will, of course, disappear as these men retire and a male trainee was being prepared to eventually take over this work.

Once the pattern is verified in this manner as viable for manufacture under real production conditions, and customer approval given, the patterns are made into cutting dies for the cutting or 'clicking' department.

The Stores:

Materials are quality checked on arrival by men, who transport the material as required to the factory floor. The prime justification for this as men's

work stressed the manual aspects of materials handling, and little emphasis was placed on the trained eye of the store men who check skins and material for blemishes or other faults. As with handling processes in other case studies, the actual manual element in manoeuvring tasks was slight due to the use of mechanical lifting aids.

Cutting or 'Clicking':

The first production process is to cut the component parts of the shoe pattern from polyurethane sheet fabric or skins. These are placed by the cutter on a flat-bedded press which can be up to six feet wide; this is male work. He positions the die on the fabric and the press head comes down to stamp out the pattern. It is a process virtually identical to pastry cutting, except that the pressure for the cut is applied mechanically. The die is re-positioned by hand and the process repeated until no further cuts can be made from the piece of material.

The work is regarded as skilled and second only to the top skilled job of 'four-part toe lasting', described below. As already mentioned, the major components of the cutter's skilled status emanate from the need for judgement in cutting appropriate parts of the shoe in harmony with the texture variations across a single skin, whilst simultaneously deriving the maximum number of cuts per hide. Fashion shifts to man-made materials which have a uniform texture and behaviour removes a substantial element of the cutter's skill.

There are none of the characteristics typical of jobs ascribed as masculine. Indeed, quite the reverse for, as noted, the cutting task bears a close

resemblance to the domestic task of pastry cutting, carried out under the domestic division of labour by women; as does the making of proto-types to home dressmaking. One reason why women don't do these jobs and why the similarities with domestic labour are subverted is due to the close proximity of women sewing machinists performing the next stage in the process and whose work is both regarded as less skilled and emphatically associated with domestic labour. This example illustrates a major point about gender construction: that whilst the content of men's and women's work may not be all that dissimilar, the labelling of work as masculine or feminine, at least in mixed gender workforces, always takes place with reference to each other within the technical division of labour. It is highly contextual. Beyond normal human attributes such as having control over motor functions, and average levels of cognition, there is nothing intrinsic to these jobs to make them necessarily male or female work. What does seem to be intrinsic to any job in such workforces is that it is gender distinct. In this case, the salient feature of men's work is quite simply that it is not women's work. The fact that the women's work here is very closely associated with women's domestic labour seems to preclude any identical association being made within the workplace for men. The construction of gender within the workplace then takes place along different axes; both in relation to the wider gender division of labour between home and work and in a more direct relation to each other within production. This is reminiscent of the situation in biscuit manufacture where the similarity of ovenmen's work to domestic cooking was never explicit, but the fact that baking jobs were not packing work which was done by women, was highly relevant. There the very strong gender demarcation within the workplace between baking and packing overpowered and dissolved any association between

cooking biscuits in the factory and baking at home. This mirror-imaging' in the gender-typing of jobs between workplace and the wider gender division of labour is taken up in the final chapter. In the meantime let us continue by turning to this next stage in production, known as 'closing', and see what the women do.

Closing

The cut component pieces of the uppers are stitched together by female sewing machinists. There are two or three stages involved, depending on the shoe material and style. Plastic materials require a nylon lining to be stitched in place and, depending on style, some have stiffeners incorporated inside the toe area or along the sides. Once these operations are complete, the upper is finally 'closed' at the heel seam. These operations represent the bulk of closing room functions, but there are other finer details added to shoes at this stage of production. Stamping machines imprint shoe sizes and, for polyurethane uppers, heat-embossed decoration may be applied to simulate stitching which is otherwise done by sewing machine on natural fabrics. Similarly heat treatments can be applied to simulate the granular surface texture of leather. A simple technologically-induced change of materials, therefore, has displaced some operations outside the traditional range of sewing machine tasks.

The sewing machine's extreme versatility and simplicity, however, are features that guarantee its place in production techniques, and consequently much of the effort at increasing productivity in this department has been directed at reducing handling and other superfluous movements of the machinists themselves. These cost-cutting measures represent extreme

limitations on movement. When one surveys rows of women bent over their machines, it is difficult to imagine how they could be less mobile than they already are. They work at breath-taking speed on piece work, performing the same narrow set of stitching operations over and over. They face in one direction, so that a lift of the head merely surveys your neighbour's back; in combination with the noise, this represents an effective constraint on lip movements. One can't help feeling that this layout is not accidental; after all, to Lancashire women, excessive noise in weaving sheds has proved no barrier to carrying on a conversation. This severe lack of mobility stands in sharp contrast to the men's jobs; store men obviously have the greatest degree of freedom, but all other men's work had some scope for movement and conversation. Women doing quality checks, like the men, stood to their work and could chat with their neighbour, but they had relatively little mobility. One woman described her work as "alright if you like being glued to the floor", but these women were distinguished more by their unskilled status as quality checkers. As anyone who has done repetitive and monotonous work will appreciate, scope for movement and communication relieve boredom and are attributes of the job highly valued by the worker.

All the remaining female employees worked in the lowest skilled jobs of all: attaching buttons, bows, buckles and other finishing touches such as customer information labels. They were all unskilled and formed the minority of women's work in the factory. The female majority working as sewing machinists, however, were thought at least as skilled as the men in cutting. Comparing cutting and closing, the factory manager was of the opinion that sewing machining was in fact more skilled. In reality,

however, whilst they were classed as skilled, they received lower rates than male skilled workers. Unlike some other case industries, this disparity in pay is not achieved by sleight of working different shifts to which differentials in hourly pay or shift bonuses are applied; there are no shift systems in operation. Equality of skill for these women seems here to be discounted by other 'fringe' features of their work: most important their lower pay scales compared to men, (once again, this affects the material base of patriarchal power within the home, which itself structures the gender division of labour within the family and the 'skills' associated with domestic labour, which then, in turn, spill-over to structure their paid work). But also important is the lack of scope for boredom relief. This may seem a slender point, but in an industry where most jobs are repetitive quite small differences in mobility and communication have a tremendous significance in the eyes of workers themselves.¹ The next stage of lasting and making contains the most skilled workers in footwear.

Lasting and Making:

With the upper formed in the closing operation, soles and insoles are added by the laster who, without exception, is a man. Onto the bottom of the last (a simulated foot made of wooden or plastic jointed blocks) goes the insole, and the upper is stretched over the instep face of the last by a 'pulling over' machine to overlap the 'lasting margin' (where insole and upper overlap) and is secured by tacks. The skill lies in placing the separate pieces together in alignment on the last to achieve a perfect toe shape during the 'pulling

¹Industrial and organisational psychologists have developed a keen interest in the psychological effects of repetitive and machine-paced jobs which are related to other unproductive outcomes such as absenteeism, stress, poor work motivation and even ill-health. Cox & MacKay 1979; Cox 1980; MacKay & Page, 1982; Cox, Thirloway & Cox, 1982; Cox & Cox, 1984 have found that the ability to socialise in the work setting could serve to alleviate these sorts of stresses which are typically experienced in such jobs.

over' operation. The last then moves along the 'track' where it passes through a heat treatment cabinet to set the shoe shape. It emerges ready for the sole to be fixed by a 'bottom cementer' or, more commonly for men's shoes, to be injection moulded onto the upper. If it is glued, the bottom cementer roughs the lasting margin on a machine to provide an abrasive surface to which the cement can adhere. In this factory this was daubed on by hand and the sole affixed, and then pressed until set by a machine that simultaneously gave contour to the sole. The last is now withdrawn and the formed shoe is ready for the final touches of heels and decoration. Heeling is performed by men on nailing machines who simply position the shoe with heel aligned into the machine which punches the nails home from a loaded template automatically fed with nails.

All the decoration and other finishing touches described above are now applied. Buttons and bows are applied by heat fusing twin plastic strips affixed to the shoe upper and the decoration piece respectively, labels are applied. Finally, the product is packed by a further group of women ready for despatch.

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This completes our description and preliminary analysis of the two study regions during their formation as distinct regions with distinct gender constructions and relations during the nineteenth century, and the presentation of case studies drawn from industries that today characterise those regions.

Chapter 7

Conclusions

7.1: Introduction

In the course of documenting the nature of gender construction and relations over time in the two regions there has been many a parallel capable of being drawn (in the contemporary cases especially) with the structural features of women in the labour force outlined at the outset in Chapter 2. Women are still, by and large, engaged in less skilled, lower paid jobs in a narrow range of industries and occupations.

When outlining the contemporary and historical position of women in the labour force we noted the remarkable degree of rigidity in the sex-typing of jobs, even across modes of production; it pre- and post-dates the transition to capitalism and appears in socialist societies too, as the examples from the USSR illustrated. In the period intervening between our snapshots there has, of course, been a series of upheavals which might have been more cataclysmic than they have in fact been. Despite two world wars, depression, economic restructuring and technological change, the sex segregation of jobs in Britain has displayed remarkable powers of survival.

The mainstream economic and sociological explanations for sex segregation explored in Chapter 3, and the critiques developed there, revealed the partiality of such accounts. In taking sex discrimination for granted and gender as given, they have been unable to explain how structural inequality between men and women in the labour force is created, sustained and reproduced. In counterpoint, feminist perspectives exposed the distinction between sex and gender and enlarged the concept of the social and material beyond the

reductionism and economism of mainstream accounts. In doing so they shifted the problematic to insist upon a truly social theory capable of explaining the process of gender construction and reproduction. Even so, the particular limitation of feminist contributions to the elucidation of these processes of construction and reproduction over time and space is the absence of one or other of these spatial and temporal dimensions in their analyses. Similarly, geographers rarely incorporate the insights of feminist theory into an analysis of socio-spatial processes.

The contributions of Storper and Walker in particular and the locality studies in general, together with Young's concept of a gender division of labour were discrete discourses linked to form a synthesis capable of encompassing the spatial and temporal dimensions of the social construction of gender. The resulting conceptual framework acknowledged the importance of place in the social construction of labour as whole, whilst a transhistorical concept of gendered labour allows us to address the socio-spatial form the division of labour takes under capitalism.

Arenas of social life implicated in that framework developed in Chapter 3, have, however, not been explored in depth here. The empirical focus upon the spatial division of labour and workplaces in the construction and reproduction of gender and gender relations is not intended to deny the important contribution of the domestic division of labour and relations in that construction process. Indeed, the analysis has been alive to intersections between the home and workplace.

However, the primary concern here has been to highlight the effect of place on gender construction and relations as an additional element in the dynamic

underlying changes in the 'spatial division of paid labour' over time. Nevertheless, the concept of a transhistorical gender division of labour has entailed an approach that poses sex segregation as a historical problem and made explicit the idea that the overarching gender division of labour under capitalism is itself a spatial division of labour between: home and work, economy and family, paid and unpaid labour, production and reproduction. Thus, whilst the spotlight throughout has focussed upon the 'spatial division of labour' (in its orthodox sense) and the workplace, the domestic division of labour and relations are an integral part of the gender division of labour. These extra-workplace relations are, therefore, implied in the dynamic of changes in the spatial division of labour under capitalism. (This is recognised by Storper & Walker themselves, but is limited to a notion of a culture of place wholly derived from relations within production and the historical engagement with capital). In the development of Young's formulation it has been argued that being outside 'production' is still a relation to production which itself forms part of the gendering process in capitalism. As the foregoing case studies suggest, the domestic sphere is one arena of the wider gender division of labour whose specific division of labour and relations enter the gender construction process in the workplace.

The additional empirical focus upon manufacturing activity within the study regions may seem to paradoxically exclude activities that, today at least, characterise our regions and gender divisions within the labour force as whole. Services industries do dominate local employment structures in the two study regions. Moreover, employment in the services sector is recognised as gender-biased toward the employment of women, even if it is not as gender-specific and undifferentiated as is sometimes asserted, as the analysis in Chapter 4 reveals. The specific effects of place that has concerned us here requires an

empirical focus on the spatially unique features of the labour force in places. Whilst it is true that employment in services predominate overall in our regions, this is by no means a unique spatial feature. It is, as already pointed out, a characteristic shared by nearly all locally defined (TTWA) labour forces. The pattern of service employment treated as whole is, therefore, fairly spatially homogeneous; a feature which, in the case of the 'big two' (Education and Medical & Dental Services that characteristically head the employment structure) is almost certainly derived from the nature of the service provided and, more importantly, the fact that these two activities are services provided by the state. As an aside, recent moves to 'reform' these public services may well be instrumental in introducing spatial differentiation in service activity. This would not be surprising for, in exposing state services such as health and education to 'market forces', they are subjected to those same competitive forces that drive the dynamic underpinning changes in the spatial division of labour in fully socialised production under capitalism.

For the moment, however, it is the spatial division of manufacturing and other non-service activity which makes the major contribution to spatial differences, demarcating and distinguishing what is local and spatially-specific. Even so, while service activity is currently fairly spatially homogeneous, the division of labour within services is not gender neutral; indeed, it is highly salient for women's paid employment up and down the country. This salience of service employment for women's paid employment is characterised no less by gender construction processes and relations. These features of service employment and its more spatially uniform nature, however, *makes its own contribution* to the horizontal and vertical sex segregated structure of the social division of paid labour in general. As we move on to develop the analysis of the case studies, this wider social division of labour is revealed as capable of being mobilised to

form one aspect of the gender construction process in particular places. Whilst, therefore, the social division of labour is not spatially varied in itself, its representation in particular places renders wider gender processes and relations available to workplace constructions.

This is only one aspect of what appears to be a bewildering amalgam of attributes and ascriptions of gender over space and time encountered in the case studies. To make sense of some of this complexity, I want to first deal with some general features of gender attributes emerging from the two study regions prior to specifying particular examples of these from the case material.

7.2 Some General Features of Gender Attributes

From a reading of the cases studies it is readily apparent that the *content* of social constructions of gender is extremely dynamic over space and time. This dynamism is evidenced in the way attributes are applied in subjective, selective, arbitrary and contradictory ways. Thus they are not necessarily based upon objective foundations. The heaviness of women's work (in the nineteenth century potbank or twentieth century paper inspection in Lancashire) is invisible. It is ignored in a selective way in constructing their work as female work. In both cases this demonstrates an abiding feature of the process of gender construction, that is: it is *mutually exclusive* and *always constructed in relation to one another*. Furthermore, the social and spatial referents used to achieve this mutually exclusive form of gender construction and relations vary in different workplace contexts. This is an important point which is expanded later. To complete this particular example, the reference point in each case was the fact that female heavy work would have contradicted male claims to this attribute in the same workplace context. Thus other non-shared gender attributes of these jobs performed by women became the selected criterion and overrode the salience of gender shared work content.

Another aspect of attributes is their arbitrary ascription. The same attributional content can be used to ascribed work as masculine or feminine; nearly everywhere experientially-derived knowledge is ascribed as masculine (as already alluded to in the case material, the length of experience which confers such knowledge is underpinned by gender relations exercised outside the workplace). Yet, where women exercise the same attribute, gained through work experience, as they do in Ordnance assembly work, its salience is immediately denied by counterposing the non-transferable nature of such knowledge against the transferable skills of apprenticed male workers in the same workplace.¹ Again, this construction depends upon the particularities of the technical division of labour within the workplace. Witness too the differential ascription of dexterity as masculine (nineteenth century potbank) and feminine (20th century potbank and Lancashire in both historical and contemporary periods). The *same* attribute therefore can change its gender ascription over time, within places or vary between places at one time. Against this there is another seeming paradox that emerges across space and time, and that is that some attributes (as labels) are consistently applied in a sex-specific way. Thus strength/heaviness, judgement, experiential knowledge, technical know-how, transferable skills, are always salient in the constructions of masculinity whilst feminine constructions consist of their opposites: lightness and the lack of: strength, technical competence, experiential knowledge (the domestic source rendered inert).

In documenting the case studies over time and space in the last two chapters we have made in passing brief forays into these space/time issues. The following

¹Though it is interesting to reflect that experiential knowledge women bring to the workplace from the domestic sphere generally serves to place them within less-skilled and lower paid jobs than men.

section sets out those individual strands in more depth as a preliminary to pulling the threads of the analysis together toward some final conclusions.

7.3 Gender construction in the two study regions

7.3.1 Historical comparisons across space

We begin to tease out the above fascinating distinctions with a panoramic survey of gender construction in the two regions during the nineteenth century period of industrialisation. The immediate point to reiterate about these regions is the very broad similarity between the two: both were unique in developing an industrial workforce in which women's paid work outside the home was very significant and which went against the prevailing pattern, though Lancashire women bore the brunt of scorn directed at such transgressions.. As discussed earlier, these workforces went so against the grain in part because industrialised production was carved out of the local material of a well-developed and organised domestic system of production in which the importance of women's labour was both necessary and undeniable. However, beyond this strong claim to paid work outside the home that made these two areas nationally distinctive, the construction of gender and gender relations within them were not always identical, and in many cases the two areas were profoundly at odds with each other.

The attributes used in the two regions to construct men's and women's work often possess shared characteristics but, equally, other attributes have a content which is entirely different in the two places. In some cases, as mentioned, components constructing one gender are identical to those that construct its opposite elsewhere. Thus, attributes such as dexterity and 'nimble fingers' forming part of the construction of men's work on the nineteenth century

potbank, for instance, are identical in content to those justifying the construction of women's work in the textiles industry, yet in the two regions the outcome of such similarity is to place men or women in *very different positions* within the gender division of labour within production. Before illustrating this with a few examples, let us first sweep over some of the broader points of similarity between the regions as a whole by way of recapping on some of the major themes that emerged in the historical snapshots.

In both the potteries and cotton regions an important part of gender relations was the control men had over women's paid work outside the home by means of the internal sub-contracting system. This gave men some limited influence over access to paid work for particular women, mostly their wives. Even in weaving, where tacklers had much less direct control, they could nevertheless, in their role as recruiters, exercise discretion as to **which** women-worked. In both areas, men too had considerable influence over the levels of women's wages, either directly through internal sub-contract arrangements or, again in the case of weaving, less tangibly in the tackler's ability to prioritise loom maintenance and attendance to loom stoppages.¹ In both areas such supervision and control over women within the workplace ultimately rested on male violence and reflected attempts to reinstate domestic patriarchal authority relations within the workplace.

Unlike other regions, the normalisation of these patriarchal relations did not take the predominant form of a gender division of labour between home and work,

¹The power to influence recruitment should not be underestimated in weaving communities that were mostly concentrated in the smaller towns at the head of the Lancashire valleys. The sanction for crossing swords with the tackler could easily have the consequence for individual women of being blacklisted from weaving work in the entire area. Unlike the Potteries' sub-contractor men who sub-contracted on their own account, making it more difficult to conspire in this way, tacklers had their own union providing a ready and easy channel for such information to be broadcast; as did male mule spinners.

that is a spatial division of labour, reinforced by the establishment of the family wage as the male breadwinner wage. The technical division of labour along gender lines under the domestic system in these two regions made that particular spatial resolution of the disruption to gender relations very difficult to impose. Further, men in these regions were unable to underwrite their patriarchal authority within the home purely by dint of being wage labourers: that is by structuring women's relation to production in general. In such circumstances, as I argued in the theoretical discussion in Chapter 3, the workplace itself comes to assume a central role in constructing gender and shaping gender relations. Building upon the work of Storper and Walker that conceptualises the spatial division of labour as shaping workforce characteristics in place and thus as constitutive of spatial divisions within labour, I also argued for an extension of this relation to include gender as a key division of and within labour, so that the spatial division of and within labour entails a gender division of and within labour. Inserting the added dimension of gender into the social construction of labour they put forward into the framework developed here, we can now begin to pull out the similarities and differences in gender construction and relations between the study regions along the axes of space and time.

To begin with let us look across the two regions during the nineteenth century in much more detail. As already outlined, the construction of men's work and masculinity in the two regions shares the key distinction of control over access to paid work. Within the workplace too men supervised and controlled work effort together with the level of remuneration of the female employees they oversaw or sub-contracted. Other common features distinguishing male work across the regions were the hot environments in which men worked (mould-

runners, saggar placers and spinners)¹ or the need for strength to perform heavy tasks (spinners, weaving tacklers and tureen painters). Correspondingly, the construction of women's work was in part negatively correlated with these masculine attributes in that the heavy work they performed was invisible, and being under the supervision and control of male sub-contractors were defining features of female gendered work.

The differences between genders across these regions during the nineteenth century are more striking. Taking masculine work, whilst strength was a salient feature in both the Potteries and the Cotton Region, the notion of strength was by no means comparable. In the potbank, in jobs where work was undeniably heavy in nature (eg: slip-making and milling at the clay end) this does not enter justifications for their ascription as masculine work. - with women wedgers working alongside them, the heaviness of their work was plainly insufficient by itself to differentiate it as masculine. More prominent in defining their work was the need for judgement in mixing bodies and the preservation of their secret composition: this is the point at which attributes of the job begin to diverge. It is at this point of differentiation that processes for constructing gender can begin to operate. As other examples that follow corroborate, this is a feature of the social construction process where men and women share the same workplace. Yet, in another workshop across the potbank, men who painted tureens *were* regarded as doing heavier work simply because women did smaller and lighter articles such as cups or plates; regardless of the fact that finished tureens plus their food contents would almost certainly have been carried to table and washed after use by women in the home. The 1919 Parliament Committee Report that surveyed women's work in

¹Notice this did not figure as important for sub-contracted piecers working feet away from male spinners!

industry before the First World War is replete with examples of this highly relational kind given by employers in evidence to the Committee. For instance, in casting, men did fancy work, women did plain pieces; in dipping, women did the smaller pieces. There are many more examples, but I want to put those aside for the moment until we come to develop this point about gender always being constructed in relation to one another more fully a little later, and continue for now with the points of difference between genders during the nineteenth century across these regions.

These 'heavy' jobs on the potbank, of course, bear no relation to the notions of strength that had currency in Lancashire at the time. Tackling work in weaving did require the ability to lift heavy warp beams into the looms, and whilst the spinner's work was regarded as needing commensurable amounts of strength to perform, this was largely unfounded in reality once mules became self-acting. Instead, there was an additional component differentiating men's from women's work in the textiles industry shared by both mule spinners and tacklers, which is absent from constructions of male work in the potbank, and that is the emphasis placed on mechanical expertise. Early mules could be very temperamental to operate, and a strong element constructing mule spinning work as masculine was the ability to coax a good performance out of the machine (Lazonick:1979). Similarly, tacklers were responsible for 'gaiting' the loom prior to the onset of weaving, as well as for loom maintenance and repair. For men on the potbank, however, whilst they used some machinery, such as jolliers and jiggers, their association with machinery conveyed no such thing. Indeed, quite the opposite was true: where women did use such machinery, the argument ran that machines made the work lighter work compared to the hand methods in which men were engaged.¹ This ascription of mechanical or

¹1919 Parliamentary Committee Report on Women in Industry, op.cit.,p121.

technical know-how as masculine was unique to men in Lancashire in the nineteenth century, though, as we shall see, this is an attribute which today has a much wider application and salience in constructing masculine work.

Yet another and very prominent feature of men's work on the potbank was dexterity. In an industry based predominantly on hand technology, the overriding features of masculine work were based on skill and judgement, composed of attributes like dexterity, nimble fingers (throwers), flicks of the wrist (dippers) and accuracy of eye and hand (male painters) in utter discord and contradiction to constructions of masculinity elsewhere in the country. Over in the Cotton region, the overwhelming feature of men's work in spinning and weaving was based on strength and mechanical ability but this time, and all importantly, in counterpoint to the dexterity of piecers or women weavers. Yet no such gender contrasts and contradictions were apparent within the potbank since the heavy work that women did do, such as treading lathes, kicking and turning wheels for throwers or wedging clay, was invisible. The social construction of masculinity and femininity in each of these regions was emphatically connected to their immediate labour process context and shaped in a symbiotic way.

Beyond these aide roles and the formal subsumption of women under patriarchal authority in the two regions, constructions of women and women's work were quite different. For instance, only very exceptionally did women on the potbank achieve any kind of skilled status. For the most part the work they did was devalued in relation to men by one of three principal means. First, it could be rendered virtually invisible, especially where it mirrored men's work; as in the case of women wedgers. Similarly, women who provided motive power for men, by virtue of performing tasks that were virtually an extension of

the movements men performed, also had a very low profile. Secondly, where they worked in the same occupations as men, as casters, dippers, placers, painters or as jolliers and jiggers, their work was demeaned by drawing a direct and highly relative internal comparison with their male counterparts who, it is claimed, did fancier, heavier or more complex work. Thirdly, their invisibility or lower skilled work was often reinforced by their spatial segregation into separate workshops around which moral distinctions between women were formed. Inside them they posed no threat to masculine constructions, even though elements of their work had objective parallels with men elsewhere on the potbank; outside them they were invisible as women because they worked with men. Within these workshop 'havens' many of the most skilled jobs that women performed were situated, and inside them women seem to have been able to preserve their moral status as 'ladies': outside them, as coarse and vulgar women, they did not exist and could not, therefore, be engaged in comparisons with men's work. This spatial segregation within the potbank, by maintaining the moral distinctions between women thus appears in harmony with, or at least did not so starkly contradict, the prevailing gender division of labour which was the spatial divide between the home and workplace. Coupled with the fact that wages for pottery workers as a whole tended to be low, meant that even the majority of men might have found it more difficult to be outright breadwinners, so that women's paid work outside the home was still important to the family wage in its older sense of a group income. Neither women's nor men's wages on the whole made them independent of the family. The domestic production unit therefore remained, to some extent, intact and transferred its labouring activity to a public milieu, but its members engaged in a labour process subject to different social relations of production. Women to a large degree remained under patriarchal authority relations either directly or indirectly. Either within the private spaces of the

potbank that mirrored the private character of the domestic sphere and thus were ideologically located in the feminine sphere of the gender division of labour between home and work, or as sub-contracted labour. Women's waged work in the Potteries region thus did not constitute a rupturing of gender relations to the same degree as it did in Lancashire, nor did it so flagrantly flout emerging notions of a woman's proper role and sphere.

By contrast, women in the Cotton region did perform skilled work and earned levels of pay that most certainly undermined the idea of a male breadwinner's wage. That this freedom from material dependence was so different and threatening emerges from the obsession of commentators of the time like Gaskell with both the level and pattern of factory women's unrestrained consumption of music halls and clothing etc., that made them independent of patriarchal domestic relations in the home that elsewhere determined the allocation of income among family members.

7.3.2 Comparisons over time and space

Turning to the twentieth century, that distilled local context and its associated gender patterns and relations given by the technical division of labour of an industry which dominated regional employment has itself become much more varied. The pattern of the spatial division of labour has changed from one where in the nineteenth century it was very much a regionally and sectorally differentiated society, to one where the **overall** employment structure makes for less regionally distinct and more spatially homogeneous regions, and yet there remain differences between the two regions.

A large part of what is happening in the geographical changes we see across the country today (documented in Chapter 2) is a reflection of the major shifts in the spatial division of labour that have taken place during the last decade or so of

our study period. Within the regions, however, these wider changes confronted workforces that have in a large measure been constituted as part and parcel of the traditional industries that once defined them as regions and whose social character, as we have just described, differed in many respects. Storper & Walker's emphasis on locally unique workforces shaped by past, and in turn shaping future, social relations between capital and labour in the workplace certainly captures the social dynamic behind these changes in the spatial division of labour. Their analysis provides us with the key insight that labour, so constituted by workplace relations, carries these relations beyond the workplace into the community in such a way that the remnants of past spatial divisions of labour are spatially fixed or deposited in a region's local culture and traditions which future generations of wage labour, reproduced in that place, inherit and carry forward to new work situations. Storper & Walker were definitely getting at something important and real here, but they left out of their analysis a crucial distinction characterising labour in different regions: gender.

As we have seen for the nineteenth century generally, constructions of gender and gender relations in the past have been highly regionally differentiated, both in terms of the relation to production and within production relations at the workplace itself. What we can show here is that gender construction and relations themselves are reproduced in place, and are another, and important, facet of regional labour forces that influence the dynamic of spatial change. Whilst our focus here has been on the way the workplace has shaped gender and gender relations, it should not be forgotten that an important feature that distinguished gender relations between places in the past has been the influence of local patriarchal gender relations upon women's ability to enter the labour market as wage labour in the first place. Our study regions, remember, shared a somewhat unique experience during the nineteenth century in that women

entered wage labour and did so in much greater proportions than elsewhere. It is unremarkable then that the contours of a newly-emerging spatial division of labour today are mapped onto regions where the gender division of labour and gender relations historically took this spatial form most strongly: that is, where the male breadwinner norm and notions of women as predominantly unpaid domestic labour were been most firmly established and sharply drawn. In the coalfields, for example, the very public decimation of these industries has simultaneously destabilised, if not deconstructed, the social content of masculinity inherited from that historical spatial gender division of labour and gender relations. Men in the valleys of South Wales can no longer claim exclusivity to the breadwinner role, whilst 'Welsh Mams' now underpin the fortunes of new foreign empires of the sun in contrast to the men who dug the foundations of an older empire

Storper and Walker's productionist bias that leads them to conceptualise labour and solely constituted in relation to capital does not alert them to the overarching social (gender) division of labour in capitalist society between home and work, production and reproduction, despite the fact that their analysis encompasses the way the spatial division of production activity and relations interact with the reproduction of labour, leaving imprints in places which later provide an important dynamic in the spatial organisation of future productive activity. The lack of a concept of patriarchy leads them to discount the overarching form of the division of labour: the gender division of labour between wage and non-wage labour, home and work, which is integral to the spatial division of and within labour. A crucial part of explaining the spatial dynamic of capital accumulation, therefore, must take account of the spatial unevenness of the gender division of labour and gender relations and the way patriarchal relations have articulated with the key capitalist spatial divisions and relations they

identify to shape and reshape the relation to production and relations within production on a gender basis.

In capitalist society a key element of social being is bound up with being a wage labourer; witness the material and psychological distress of unemployment. Had Storper and Walker been sensitive to the spatial form the gender division of labour has taken under capitalism it would be apparent that a large element in the spatial dynamic of the organisation of capital is related to this overarching spatial division of and within labour.

The spatial legacy of the nineteenth century capitalist division of social labour has been that large parts of Britain have been composed of social labour - women's labour - that had no large-scale and consistent experience of wage labour at all. Consistent with Storper and Walker's analysis, it can be seen that these spatially differentiated gender relations to production are also the repository of a past spatial division of labour induced by capital which were patriarchally mediated and imposed. As stressed at the outset, women were every bit as likely to be working down a mine or performing heavy labour during the early period of industrialisation. This spatial gender division of labour was not ubiquitous. Where women did breach the primary socio-spatial division of home and work to enter wage labour in large numbers in regionally dominant industries, as in our study regions, the gender relation to production was still to some extent, regulated by patriarchal control. Whilst men were unable to achieve a structuring of women's relation to production in the prevailing form of enforcing exclusion from wage labour outright, (and thus underwrite their breadwinner status and material basis of domestic authority) they nevertheless exercised a measure of control over access to, and the rewards from, the key social relation in capitalist society. Through their gatekeeping

role as recruiters of labour together with some measure of control over wages or the piece output of women, men reasserted a number of devices to shape that relation to production and temper the domestic repercussions that the individuation of the wage threatened. Underpinned by physical violence within the workplace, these strategies allowed for a degree of manipulation of women's relation to and within production. Nevertheless, as the contemporary accounts of the leisure time pursuits of women indicated, gender relations at the workplace were sometimes difficult to translate into male authority in the domestic sphere.

The fact of wage labour and gender relations inside the workplace were, therefore, more central to the social construction of gender in these two regions: by reference to relations within production rather than the relation to production. In the Potteries the workplace parodied the wider spatial gender division of labour and, in both regions, whilst the value of women's waged work for the household could not be denied, their labour has been structured within the technical division of labour as less skilled and lower paid than their male counterparts. These two regional workforces in particular have confronted the recent changes in the spatial division of labour from a less than typical base. There have been both continuities and breaks with the past in the way gender is constructed in the two regions.

Taking the continuities first, an abiding and central attribute in constructions of women's work in the Cotton region is their supposedly superior dexterity, where it survives as a distinctive attribute justifying the weaving of finer cloths by women. Among the case study industries that characterise the region today, dexterity still features prominently in justifications for the gender division of labour within the workplace; in ordnance and small arms assembly work and

paper inspection, for instance. Similarly, in textiles, men's work continues to rely on the attributes of strength and the heaviness of job tasks in both the spinning and weaving branches. The method of preserving such boundaries too still resides in patriarchal, all-male, union restrictive practices and, until very recently, male violence in its implicit and subtle new form of the dangers of night working for women which ultimately underpinned such 'protective' legislation. But there have also been major breaks with the past, particularly in the kind of attributes gendering women in the Cotton region, that simultaneously alter the context within which masculinity also is shaped.

One of the most astounding things to emerge out of the region's case studies in both regions is the emphasis placed on women's domestic role and the assumed consequences this is deemed to have upon their suitability as wage labourers.¹ For the past century and a half the ability of women to enter paid work in these regions has been unquestionable: it has never been an issue or problem despite vigorous attempts to make it one historically. It does appear that that long-established right of access to paid work (especially in the Cotton region) is in the process of being eroded in several ways. Generally, notions of greater absenteeism among women due to domestic responsibilities were mentioned in several contexts, most notably and explicitly by one weaving establishment, but it also featured as an attribute of women working in other contemporary case studies.

Not only is there a destabilisation of the right to work for women, but the demands of domestic labour are also asserted in many contemporary industries as negative factors in justifications for the technical division of labour along

¹Note this is the inverse of the nineteenth century argument where wage labour by women was corrupting domestic skills.

gender lines. Thus in the context of new production technologies and forms of work organisation that require intensive operation round the clock and special training off the producer's premises, women's biology, (getting pregnant, smaller stature) as well as wider gender relations within the home are being pressed into service to justify the choice of men to work on new machines (especially in textiles) which entail shifts considered antagonistic with the wider established domestic gender relations: shifts whose duration is shorter than women have traditionally worked in these industries but whose **patterns** conflict with child care particularly, as we saw in the cotton weaving, ordnance, and aerospace industries.

The claim to newer technology by men in weaving is part and parcel of sustaining the claim to the traditional skilled status of weaving as an occupation, against which the lower (older) technology, to which women weavers are increasingly confined, will probably appear less-skilled. Such technological demarcations of men's and women's work have not yet fully surfaced. Indeed, there may be little or no need to underline the gender difference in this way, because the newer looms are both wider and work at much greater speed and therefore carry more 'picks' (the unit for calculating piece pay) making for disparities in earnings between men and women according to the technological capacity of the looms they work upon.

All these breaks with the past making for a greater emphasis on women as less reliable and less stable wage labour, or as less skilled or lower paid workers, that are emerging out of these workplace gender relations are moves that overall are shifting the social construction of gender in the two regions towards the dominant mould shaping gender relations more widely in the country as a whole; that is as male breadwinners and female secondary wage labourers.

Could it be that domestic ideology, with all that implies for that overarching gender division of labour between the separate spaces of home and work, is finding its first tentative foothold which elsewhere has for so long been part of the national culture and consciousness upon which local social processes have drawn?

In North Staffordshire too there has been stability and change in the constitutive attributes of masculinity and femininity. There are still traces of that old morality distinction that symbolised within the potbank the more generally applicable spatial division of gender between paid work and unpaid domestic labour during the nineteenth century. Embedded within that distinction in the context of the potbank, remember, were notions of clean and dirty work as respectively feminine or masculine attributes, and it is interesting to note that these same notions today are now loosely aligned to the distinction between the more mechanised and male-oriented 'industrial' branches of the industry and the female labour-intensive craft sub-divisions of fine tableware in which the finishing and decorating stages of production are especially prominent. Whilst intriguing, this is perhaps stretching the analysis a bit too far, and I am certainly not claiming any rigid parallel with the past. Indeed, on the whole, as I pointed out earlier in Chapter 5, the gender division of labour within the pottery industry has been remarkably durable over time. Even so, the content of masculine and feminine work has, in some respects, changed remarkably. Working machinery in whatever branch of the pottery industry is now much more firmly cemented to masculinity and some of the most skilled jobs in pottery production. As already mentioned, the historical association with machinery conferred a less skilled content of work tasks. Then the countervailing comparison was with male potting and casting work for which machinery was unsuitable. Similarly, the dexterity of those highly skilled male

hand-craftsmen who formed pots has, more recently, been dislocated from masculine work. Dexterity still retains its association with hand work, but the concentration of hand methods of production today is in the finishing processes of painting and decorating where women predominate and whose jobs can claim no such elevated claims to skilled status. The most skilled jobs are now associated with the more mechanised and 'industrial' processes in which men are primarily engaged. This introduces a major point about skill and gender ascription. In themselves skills are arbitrary and gender neutral for, as this not untypical example illustrates, skills with the same content skills can be ascribed to either gender.

Moreover, it is apparent from other examples we have documented that such shifts in ascription vary both over time and space. Nevertheless, the mode of ascription in each case is always gender-specific and mutually exclusive in places. This touches upon a further point about gender construction processes in particular places that has to do with modes of gender ascription. This discussion, however, must await the full assembly of all these general points drawn from the case studies. At this juncture, however, we can note that the strings of dualisms so beloved of determinist theorists which are listed as evidence for sex-specific attributes are valid empirical accounts of gender ascription practices; but these are social practices, underpinned by social relations and do not signify hidden intrinsic properties of sex which are given coherence through immutable biological facts. Rather they attest to the creativity people exercise in shaping their social world. Such dichotomies are extrinsic and general concepts (weak/strong, passive/active, rational/irrational) which are historically and socially appropriated and ordered into constructions grounded in, reflecting and re-generating historical social relations.

Hence, elsewhere in the contemporary Potteries region being more like a man or 'one of the boys' has shifted from being a highly negative attribute associated with women to a desirable one, so contrary to the established norms of female morality laid down in the nineteenth century. Is this perhaps the contemporary form of rendering job attributes that are shared by both men and women non-competing by making the women who perform them 'invisible' as women?

As elsewhere, this 'mirror-imaging' in the process of gender-typing jobs was reinforced by wider gender divisions and ideological factors supporting the gender ascription as masculine or feminine; the sharper the image the better the reflection. Thus, female sewing machinists worked in a physically isolated area from the cutters, despite being the adjacent process in the production sequence. More telling, however, was the general ascription of sewing work as women's work by the wider gender division of labour performed by women in the household. This exclusivity as female work guaranteed by wider gender relations provides, so to speak, a model around which the particularities of paid work are moulded. This brings us on to another major point about gender construction generally, and that is that this model given by wider patriarchal relations that structure the gender division of labour in other spheres is also, simultaneously, a model that is reproduced by its deployment in structuring gender relations within the workplace. Because wage labour under capitalism is a key social relation, an individual's relation to production (as wage labourer or conversely domestic labourer or unemployed) is a defining feature of social being. As argued in Chapter 3, patriarchal gender relations within the family in combination with a capitalist mode of production historically shaped the overall gender division of labour in society between domestic and wage-labour. One effect was to structure the gender division of labour with reference to the relation to production: whether an individual was inside or outside capitalist

production was still a relation to production. Another effect is that gender relations within production - the position in the social and technical division of labour - have themselves, in turn, come to structure the wider gender division of labour.

All these changes in gender construction we have documented over both space and time attest to the fact that notions of gender as composed of fixed sets of attributes attached to one specific gender implicit in so many of the labour market theories (discussed in Chapter 3) simply cannot be imputed. There are no immutable gender stereotypes; they change, as I have shown, over time and between places and have no concrete reality other than within the contexts set by those historical and spatial boundaries: they are **social constructions** as opposed to the metaphysical constructs so favoured by biological determinists. As social relations, with all the dynamic and variation that implies, gender and gender relations are constructed **in relation to one another**. This is the one and only thing that does remain constant and fixed about gender over time and space.

In the run of the argument so far I have only fleetingly touched on this relational aspect of gender construction and relations, and we can now pick up this point more fully for the two sets of historical and contemporary case studies.

Whilst the form of gender relations are patriarchal in nature, it is by now perfectly clear that it is not only the **content** of attributes that are non-gender-specific, but that attributes such as strength, for example, themselves are arbitrary and susceptible to shifts in meaning and value, and that that social value varies across different local workforces and workplace contexts given by past spatial divisions of labour. But it is also just as clear that whilst the spatial

divisions within and between labour are so central a dynamic in gender construction and relations, and that moreover these take shape by reference to the social gender division of labour generally as well as within the particularities of the technical division of labour within the sector and the firm, the process of gender construction can equally take account of ideological and cultural constructs that have a much broader currency beyond the confines and specificities of place at any particular time. Put another way, the local and specific contexts within which gender is constructed and gender relations operate may be the prime resources with which 'men make history' but they are not the only resources. From all these particularities of place and history emerges a composite and national consciousness or hegemonic cultural stereotype of what it is to be masculine or feminine.

This national collective consciousness can be drawn upon to firm-up locally specific gender constructions. The content of these national notions of masculinity and femininity have, at least for the visible past, been greatly influenced by the character of workforces like mining and shipbuilding communities that have played a very dominant role in the national economy throughout our industrial past. They have had an extremely high regional profile as a result. That such national constructs exist is readily apparent when thinking of more extreme examples from quite different and unfamiliar societies, for we could probably agree quite closely that the content of masculinity in ancient Sparta or nineteenth century Zululand was heavily bound up with the attributes making for a good warrior or agree upon the macho content of masculinity in some Latin American countries; constructions that in many cases are also based upon the dominant social and economic relations of their time and place.

The existence of this national collective consciousness can play a part in the construction of regional gender differentiation, for whilst labour may be reproduced in a place, the conceptual framework within which social processes operate is far more extensive, and it is possible that the geographical boundaries of gender comparisons that real people make within the workplace consequently go far beyond its confines. Thus in the nineteenth century, regional gender differentiation clearly drew upon pre-existing domestic relations during the transition of production from home to workplace. Yet as capitalism developed and wage labour became the pivotal social relation in a capitalist society, so there developed a nascent notion of masculinity with a strong productionist bias that informed the national constructs of gender embodied in the domestic ideology of the period.

Yet, in the dominant industries of the Cotton and Potteries regions there was no local equivalence of masculine-biased production: women were an important part of the workforce in industries that vied with those very masculine-oriented industries dominant in the national economy.¹ As such they were regions probably less well-disposed to make use of the nascent national consciousness of gender: they were in fact the antithesis of it, so that the local regional construction of gender has been more intrinsic to these places as a result. They did not need to draw upon the wider conceptual framework and ideological constructs: indeed, the national consciousness fought such local aberrations - Lancashire women, the representational effigy of all working women, were abhorred and vilified for trespassing on masculine space. Gender constructions in these regions during the nineteenth century were therefore intensely interdependent and local. Thus in textiles, in both spinning and weaving, the attributes embedded within gender displayed strong oppositional characteristics;

¹England's bread was said to hang by Lancashire's thread.

strength for men and dexterity for women, and these highly local regional differentiations of gender are still strongly in evidence in the textiles industry today in the Cotton region, despite major shifts in the gender division of labour within the textiles industry workplace. In the potbank too, as we have seen, notions of strength and skill ascribed to men were closely associated with workplace constructions of women's work. The male painter's claim of strength in working heavier objects simply could not have been sustained in comparison with national constructs of masculine heavy work or, indeed, with the content of women's domestic tasks.

What we see today in these regions is, of course, a much more fragmented picture as these regions have become much more sectorally differentiated. But, the new spatial division of labour has confronted these established gender relations in different ways.

In mixed gender workforces today the pattern of gender construction seems to have built much more directly upon the foundations laid down by those formerly regionally-specific traditional industries that created spatially unique notions of gender and which, over time, have passed into the regional consciousness. Hence, apart from the strong continuities already outlined above within the traditional mixed gender industries, other newer industries within these regions that also make significant use of female labour display the same sort of local constructions based upon gender comparisons within the workplace: that is, internal to the particular workforce. In the Potteries, the construction of gendered work in Biscuit manufacture, for instance is, like the pottery industry, still strongly based on internal workplace comparison of what men and women do. The broad technical division of biscuit manufacture into two fairly gender-distinct 'ends' has, of course, parallels with the pottery

industry today. In the biscuit industry the principal features of the skill and attributes required for mixing and ovenmen jobs were positively correlated to the non-transferability of women's comparatively lower skills, at the packing end. An important component embodied within these notions of transferability and skill was the physical strength needed for mixing work. Interestingly, the presence of young men in the packing end who load filled cartons onto pallets magnifies and seems to almost guarantee the strength distinction made at the process end by closing off an area of work within the predominantly female packing area that could be seen to parallel what men are doing elsewhere in the same workplace.

This transferability of skills across, and particular to, the workplace features in other mixed gender workforces in both regions that are similarly building upon their respective regional gender foundations. In the Cotton region this is especially clear in the case of Ordnance and Small Arms manufacturing where women assembly workers, though objectively regarded as performing skilled work, were formally classed as unskilled purely by dint of the fact that men who worked in the machine tool shop had served apprenticeships and thus their skills were transferable beyond the limited and experientially-gained expertise of assembly work.

That these gender construction processes are so internally comparative and related to gender relations within a workplace is evidenced by the fact that many male jobs in other cases studies were precisely justified as skilled and peculiarly masculine on the identical basis of empirically-derived and particular knowledge gained within the industries in which they worked. In paper-making, paint manufacture, and brewing, for example, skill and judgement based upon experiential knowledge is seen as so exclusively masculine: male

central process workers on paper-making and coatings machines, the colour-matcher in the paint industry and the panel operator in brewing, represent the antithesis of women's work in those industries.

In yet another case, that of Aerospace, where women were a substantial component of the workforce, the major gender distinctions were between the fabrications machine tool shop containing time-served men and unskilled women electrical component assemblers. Despite the physical separation of fabrication and assembly the construction of gender here is internally comparative, too. Thus men's work was dirtier (more oily) and heavier: women's work was cleaner, lighter and more dextrous; these gender ascriptions display the same pattern across space today in the pottery industry. In the Footwear industry where the overall gender balance (in numerical terms) within the workplace is so fine, these sorts of internal distinctions between men and women were drawn much more emphatically by the familiar device of spatial segregation and, associated with this, the scope for mobility between and within those 'spaces'.

Moreover, the extent of such internal comparisons seems to be confined within some notion of direct production since, in many of the 'male enclave' industries where women were virtually or totally absent from production jobs in the two regions (brewing, electrical machinery, earth-moving equipment and paper-making), there were in fact many women workers employed in production support functions such as clerical and administrative posts, sales, office cleaning and catering. A distinctive feature of masculine gender construction in these sorts of industries is the much greater reliance upon extra-workplace and non-local reference points. The national picture for the horizontal occupational segregation of jobs along gender lines that was presented and discussed in

Chapter 2 that so shape the national consciousness of gender at work, appears to render these widely-recognised feminine enclaves as unavailable for internal comparison. In the wider social constructs of gender these kinds of indirect labour jobs in production industries are hermetically sealed off and seen as such distinct areas that they cannot possibly destabilise or otherwise influence constructions created elsewhere in the same workplace. In all the case study interviews it was always implicit when speaking of gender-typed jobs that the locus of such distinctions lay primarily within a clear notion of the actual physical production process itself. These overwhelmingly masculine-oriented industries, so defined, consequently appear to draw much more heavily upon the wider national and non-regionally-specific gender constructs. Many of the attributes ascribed to men are consistently operationalised across the country; for example, skill through apprenticeship or training, the ability to work nights and 'unsocial' hours, their technical know-how, their lack of absenteeism¹ which together add up to claims to higher skilled status and higher pay than women, reflect social constructions of gender shaped by wider patriarchal gender relations in society in the division between the home and workplace. Consistent with this they were also industries where the justifications for attributes were asserted in much more positive/absolute rather than relative/negative terms.

As we have seen, the mechanics of how this is achieved clearly have their historical and spatial referents, so that at any one time the ways gender and gender relations are constructed and structured are unevenly developed between regions. Yet it is equally apparent that it does not matter which gender attributes are in play, men always and everywhere win. Whether it is shift systems,

¹But note that absenteeism or hours of work are never a drawback where women are employed in production support functions or in those jobs firmly placed within the horizontal sexual segregation of the labour force in nursing, catering, cleaning or pubs and clubs, for instance.

apprenticeships or training, or absenteeism, or the particular attributes associated with work tasks such as strength or judgement that are utilised in different places and at different times is barely of any consequence for the structural outcome for gender construction and gender relations has a universal outcome in the wider structure of social relations.

In noting these dynamics, what we are observing is the variations in the content and ascription of attributes over time and space. Whilst these correlations of gender and attributes are fascinating and the comparisons of continuity and change over time and space are seemingly inexhaustible, they are the surface phenomena. If we were to take these effects as explanatory of gender construction we should fall foul of the same critique developed for labour market theories and sociological explanations of sex segregation in the labour force in treating empirically observed effects as causes, with little attempt to elucidate the structures which generate them.

7.3.3 Different modes of gender construction over time and space

Whilst gender constructions do change over time and space, the way this has been achieved over time has been in accordance with two main modes of gender relations. That is, there have been two distinct kinds of patriarchal strategy related to gender construction. In the nineteenth century the form of patriarchal gender relations was *generally* to structure women's relation to production by maintaining the spatial gender division of labour between home and work. In our two regions patriarchal gender relations could not take this form, though male workers could still mediate this relation to production to a more limited extent. Instead, the dominant form of gender relations in the Cotton and Potteries regions was to structure relations **within** production itself, through

the assertion of patriarchal authority relations and control of material earnings by men, in an attempt to temper the threat to male 'breadwinner' status. Strategies involving the total exclusion of women from paid work in particular industries (and therefore particular regions in the nineteenth century) that men elsewhere successfully imposed were only partial in Lancashire and Staffordshire. The imperfect control men in these regions exercised over the fact of women's paid labour had to be reinforced by patriarchal relations inside the workplace. Whilst our regions were unusual, the more general form of a spatially-divided gender division of labour laid down during the nineteenth century has later entered the dynamic of changes in the spatial division of labour. What was an unusual regional experience of the gender division of labour under capitalism in our two regions is now, in the twentieth century, the common experience. As we saw in Chapter 2, the spatial effects of changes in the labour force and economic restructuring have seen a levelling of women's participation in paid labour across the country. In areas where their participation has been low or virtually non-existent, the entry of women into the workforce has correspondingly shifted the terrain of patriarchal gender construction. Remembering that production is a social activity, new and enlarged social domains now form the material contexts out of which gender will be constructed in relation to one another. In our two study regions, these novel domains and articulations between capitalism and patriarchy have always been part of the material out of which gender constructions have been honed - at least since industrialisation. But changes elsewhere in the country, conditioned by the past, have correspondingly reshaped the overall social division of labour - the sexual segregation of the labour force. The form of patriarchal gender relations today is thus for gender constructions and relations to take place within production. As the key social relation, structuring the position of women in the

labour force and workplace as lower skilled and lower paid now underpins patriarchal dominance in this and other spheres of social life.

This wider social division of labour is, as suggested in the introductory remarks to this chapter, just one aspect of wider gender constructs that interact with gender construction processes at the local level. However, whilst constructions are always in relation to one another and are dynamic over time and space, as we have shown, there exists today in each region wide variations in the pattern and mix of industries. This local spatial division of labour and its pattern of horizontal and vertical sex segregation in the labour market forms another set of coordinates which can also exert some influence upon the gender construction process in particular workplaces. The technical division of labour within workplaces introduces a further dynamic. The materials for constructing gender at any one time or place therefore can potentially draw upon a variety of socio-spatial divisions: from the gender division of labour in general between home and workplace; the social division of paid labour as a whole (sex segregation in the labour force); the locally unique pattern of the spatial division of labour (industrial mix) or, finally, from the technical division of labour in the workplace. As the case material demonstrates, the process of gender construction in particular workplaces evokes one or more of these coordinates. Precisely which combination of these spatially-specific or non-spatially unique coordinates becomes salient for demarcating between men and women (and therefore the content of masculine and feminine constructions) varies with the sexual composition of the workforce and the detail division of labour. Thus male enclave workplaces in both regions (Brewing, Electrical Machinery & Earth Moving Equipment in the Potteries, and, Paper, Ordnance, Aerospace and Paint in the Cotton region) were industries where masculinity on the whole was positively asserted with reference to external constructs given by wider gender

relations and divisions. The women who worked in these industries were generally engaged in production support functions and thus engaged in non-competing spheres by virtue of the sex segregation of paid work. But, where they were part of the direct workforce, as tapers, and other kinds of assembly workers, internal criteria derived from the specific context of the technical division of labour within the workplace served to corroborate masculine constructs. Thus, the non-transferability of skills; lack of strength, experiential knowledge present in women's jobs were all aspects of their jobs which were directly counterfactual to what men did. In other words, a shared location in the technical division of labour served to construct men by means of a negative correlation with women: i.e. they were 'not women'. Such internal differences were often supported by the gender division of labour and domestic ideology in positively asserting attributes of women which additionally counterpoint the claimed workplace attributes of men. Hence women in these industries were more suited to repetitive and 'fiddly' jobs, and were less stable workers. Neither the spatial gender division of labour nor the technical division of labour are today sufficient in themselves to shape relations within production. In other workforces where the gender balance overall was much more fine, these wider constructs were also utilised in the gender construction process. Thus in Pottery and Biscuit manufacture in Staffs and textiles and footwear production in Lancashire, gender constructs are shaped more by the immediate context of the technical division of labour within the workplace and are characteristically highly comparative and complementary. References to the wider gender division of labour between home and work here constitute an historically *new resource* which is being mobilised from inside the workplace (shift patterns, absenteeism, access to training on newer technology) to structure women's relation *to* and *within* production, by constructing them as secondary workers.

But time, in itself, is not the key variable in these changes. The spatial division of labour in the nineteenth century was, in most of the country, a spatial division of *male* labour. Our two regions were exceptional whereas, today, those unique contexts of gender construction shaped primarily out of the technical division of labour in nineteenth century Lancashire and Staffordshire, are part of the character of spatial division of labour across the country - precisely because non-socialised women's labour was formerly the norm. Space, however, supplies the unique contexts within which gender construction processes take place to achieve patriarchal gender relations and constructions.

The multiplicity of content of gender constructions emanates from the fact that today each region is a unique distillation of the social and spatial division of paid labour. There exists between our two regions (and more generally) variations in the specific mix of industries in each region and, therefore, a corresponding variation in the sex composition of the workforces that comprise those industries. There is thus, within regions, a varying blend of mixed gender and gender enclave workforces. It is these broad features of the workplace that we have already identified as influencing which combination of spatially-specific and non-spatially unique socio-spatial divisions of labour are mobilised in the construction of gender.

In summary, gender construction always takes place in relation to one another even though the contexts of this gender relation changes over time and space. Elucidating the spatial component of gender construction in the place-specific distillation of socio-spatial divisions that can influence the way those constructions are concretely shaped, allows us to take account of a key dimension of labour, gender, which can be admitted to explanations of changes in the spatial division of labour. Whilst such spatial variations are clearly

important for intra-class and intra-gender differences as paid and unpaid labour, the focus here has been upon gender *relations*.

Even so, the outcome of all this spatial variation is nevertheless to consistently place men in a position of structural advantage. Whatever the reference point, be it relative to comparison within the workplace, or by appeal to wider and non-locally-specific gender constructs, men, irrespective of place and throughout the historical period focussed upon here are consistently placed in a position of social advantage in several ways. First by means of their position within the overall gender division of labour between home and work so that they become the primary category of wage labour - a key social relation in capitalist society. To reiterate, the relation to production is a relation that is gender differentiated. It is one to which men are widely regarded as having prior claim and one that is conditioned by patriarchal gender relations under the domestic division of labour. Secondly, gender relations within the workplace place men in positions of advantage as more skilled, more highly paid waged workers than women, and this simultaneously supports power inequalities within the home between men and women. Such material inequality within the domestic sphere in turn reflects back upon gender construction and gender relations within the workplace, allowing women to be constructed as an inferior kind of wage labour.

Whilst we have been able to reveal the material basis of gender relations as an interplay between patriarchal structural advantage in production and structural advantage within the domestic division of labour, there remains the question of the bases of patriarchal dominance in other realms of social life. This evokes a whole new set of questions and directs us to address a broader range of theories

about power relations, ideology, sexuality and male violence. Enticing as these questions are, we cannot look at them in the limited space we have here. What we can say about gender construction and gender relations, however, is that patriarchy is not monolithic and immutable, but a social relation, and consequently is subject to those same basic forces underlying social change more generally.

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Appendix I

INTERVIEW SCHEDULE

BACKGROUND INFORMATION

Name and Title of respondent:

How much influence do you have in matters of:

(a) recruitment

(b) investment

(c) training

What are the main products covered by your activities?

Are you a subsidiary of another organisation?

If so, how many sites do you operate in the local area?

Where are those?

What is the rough breakdown of the employment among these sites?

What's the difference, if any, between the sites: (**PROMPT:** Product types, type of market, different production processes, other function - sales, distribution)

What sort of processes are involved at these other sites?

Undoubtedly there have been radical changes in the industry within your memory. During the past 20 years or so, what would you pinpoint as THE period of greatest change:

From:

To:

Now, "change" is a bit broad, could I ask a few more specific questions on the trends in employment technology and the general business climate.

EMPLOYMENT

How many employees did you have at the beginning of the change period and how many at the end?

Beginning:

End:

Now:

How do you break your workforce up? (PROMPT: Part-time, temporary, young employees, hourly paid, skilled/unskilled, staff)

What is the sexual breakdown for those categories?

What happened to the proportion of those categories within your total employment both during the change period and what are these proportions now?

NOW Increased Remained Static Decreased

RECENT CHANGES IN TECHNOLOGY AND WORKING METHODS

TECHNOLOGY:

I imagine new technology has played a significant role in recent changes. Could you outline what these have been.

(PROMPT: Make sure they cover production processes, materials, and products and make sure they say the extent of adoption : **Considerable, Limited, Negligible**)

Did these come about during the change period you identified or earlier/later? What's the most recent change?

WORKING METHODS:

During the change period, what happened to the following aspects of your working methods:

- (i) state of restrictive practices
- (ii) Amount of surplus manning, if any
- (iii) Quality of management
- (iv) Organisational structure

EMPLOYMENT:

What have been the main changes (and why) in:

- (i) numbers employed at this site, the Company as a whole
- (ii) their composition by:
 - age
 - sex

locality

full & part-time

temporary and contract

Occupations and Skills: What have been the main areas of growth and decline (and why?)

Recruitment: Have you experienced difficulties in recruiting into growth or other occupations and why?

Training: What has been the extent of training/retraining of the existing and newly recruited staff? What factors have necessitated retraining?

My key interest lies in how some jobs are seen as women's work and others as men's work. Could you talk me through your labour process and, as you go along, describe who does what and why it is broken down into male/female, skilled/unskilled jobs.

What sort of shift patterns do you operate here and is there any difference between men and women in terms of shifts?

FINALLY

Key Occupations/Skills

What are likely to be the key occupations and skills, and why?

Which are the key assumptions used in assessing future trends from the point of view of employment?

Is the occupational mix sensitive to changes in the assumptions you made in assessing the future trends for the business, technology and work aspects?

OTHER COMMENTS:

PROMPT: About the area

industrial mix

how they recruit - through word of mouth/family?

Is new technology more complex/requires more/different shifts?

FURTHER CONTACTS: Who would it be best to contact?

Appendix II Who's Who of Interviewees

THE COTTON REGION INTERVIEWEES:

	Interviewee & Job Title
AEROSPACE INDUSTRY Manager	Mr S Robinson, Personnel
FOOTWEAR INDUSTRY	Mr G Smith, Factory Manager
ORDNANCE & SMALL ARMS Manager	Mr J Edwards, Personnel
PAINT MANUFACTURE Manager	Mr T Marklew, Personnel
PAPER & BOARD INDUSTRY	Mr H D Smart, General Manager, Operations.
SPINNING (Bolton)	Mr D Dear, Personnel Manager Mr J Bailey, Production Manager
SPINNING (Bolton)	Mr M Butterworth, Assistant Manager, Spinning Mill.
WEAVING (Colne)	Mr W Simpson, Works Director
WEAVING (Nelson) Manager	Mr J Humphries, Weaving
CLOTH LOOKER (Colne)	Ms Susan Gawthorp
FEMALE WEAVER (Colne)	Ms Chris Cook

POTTERIES REGION INTERVIEWEES:

BISCUIT MANUFACTURING Director	Mr S Kennedy, Production
BREWING & MALTING	Mr D G Panting, Asst. Personnel Manager Ms B Hyde, Museum Curator
EARTH-MOVING EQUIPMENT	Mr A W Ferniehough, Personnel Manager
ELECTRICAL MACHINERY Manager	Mr J R Ferguson, Personnel
FINE TABLEWARE	Mr J Morton, Tours & Museums Officer

TILE MANUFACTURE
Officer

Mrs E Creighton, Personnel

Mr D Pickering, Works Director



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(Durham)

Appendix III
Standard Approach Letter to Case Study Firms

Direct Line: 0908 653757 or
Secretary: 0908 653533

Dear

I am researching for my doctoral thesis on the historical development of the [Lancashire/Potteries] region, based in the Department of Geography and supervised by Professor Doreen Massey. As a major concern in the.....sector, which is a significant alternative to traditional [textiles/pottery] employment in the area, it would be most helpful if you could spare time for a short visit when I'm next in the area.

I plan to be in [Lancashire/Staffordshire] the whole of the week beginning [....]. My prime interest at this stage is to get a picture of your operation (particularly the labour process) and how this relates to the sector as a whole, as well as understand the sector's pattern of development over the past 20 years or so. One of my key interests is the way new skills and occupations have emerged in [Lancashire/Staffordshire] against the backcloth of the traditional industrial domination of the region.

I do hope that you, or someone in your Company, can help steer me in the right direction; I'd be most grateful for any help you can give. The results of my survey will appear in a written form, and I would be most happy to reciprocate with a copy of it, if this would be of interest to you. Needless to say, you have my assurance that I would observe any confidential limit you care to set on information you supply.

I look forward to hearing from you, and enclose a stamped addressed envelope for your reply.

Yours sincerely

Brenda Wilson
Postgraduate Researcher
Department of Geography

enclosure